

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1144—Vol. XXVII.]

LONDON, SATURDAY, JULY 25, 1857.

[STAMPED . . . SIXPENCE.
UNSTAMPED . . . FIVEPENCE.]

M. JAMES CROFTS, MINING AND SHAREBROKER,
No. 1, FINCH LANE, LONDON (established 14 years), TRANSACTS every
day in MINING SHARES, but, not being a DEALER, BUYS AND SELLS
on orders confined to him.

Mr. Crofts abandons, temporarily, his recommendations of mines in the aggregate,
and calls special attention to CATHERINE and JANE CONSOLS, Merioneth, North Wales,
15,000 shares. This concern presents some peculiar features: it has a subscribed
capital of £2000, which is more than ample for fully developing both the lead and
iron lodes, and as no further capital will be required, it is entirely free from the in-
convenience of calls. The date of all minerals for 10 years (out of a lease of 21 years),
has been compromised for by the company.

As a lead mine only, the prospects warrant the belief that it would ultimately pay
dividends. But, besides the lead lode, it possesses an immense deposit of iron ore, of
a per cent. and upwards of iron ore, as almost inexhaustible in quantity, and
situated to any extent in Wales, Scotland, and Staffordshire, at a very remunerative
profit. The dividends anticipated from the combined workings of the lead and iron
ore are much beyond any mine known to Mr. Crofts at present in the market. All
prospective advantages are, however, fully shown in the particulars issued by the
company, and various reports from the agents employed on the works, and other
competent practical parties.

By late analyses, the ironstone is found to be MAGNETIC, and is the only deposit of
that quality in the United Kingdom at present made available for commercial purposes.
Copies of the particulars and of the proceedings of the last meeting (showing the
financial condition of the property), and the reports, can be had of Mr. Crofts, and
samples of the lead and iron ore seen at his office. The shares, which from the or-
dinary causes affecting the mining market have been temporarily depressed in value,
are now beyond par. Present price, 10s. 6d. to 11s. 6d.

At the meeting of the 8th June, it was recommended that the company be regis-
tered under the Joint-Stock Companies Act of 1856, with Limited Liability, which re-
commendation will be carried into effect at the next meeting of shareholders.

The mines may be reached, via the North-Western line, in 12 hours from London: it
would form a new era in mining annals, and probably lead to the saving of some
hundreds per annum to capitalists, were they, as a rule, to visit all new concerns
before investing. Such journeys would present the agreeable feature of business and
amusement combined—the mining districts being in general of the most romantic and
picturesque character.

Mr. Crofts has lately published "A Manual of Mining," which may be had,
on application to him, gratis, and post free.

NOTE.—The most recent news from CATHERINE and JANE states the lead lode—
which has now become a most important feature of the property—to be producing
about 10 tons of ore per month, worth £15 a ton when raised, dressed, and sent to
market, and it bids fair to still further improve; one is producing 35 cwt. to the
week, another 45 cwt., and the stopes 13 cwt. The whole costs of the mine per
month being about £130, it results that the lead lode is yielding upwards of 25 per
cent. profit on the capital of £2000.

MR. JAS. LANE, 20, THREADNEEDLE STREET, LONDON,
is a BUYER of South Wales, Buller, Bassett, East Bassett, Devon Great
Consols, Lady Bertha, Catherine and Jane, Edward, Pembroke and East Crinias, &c.
and is a SELLER of 500 Collyer Shares, at 5s. per share.

JAMES B. BRENCHLEY, 11, ROYAL EXCHANGE, LONDON,
E.C., has FOR SALE, at the current prices of the day, the following DIVI-
DEND AND NON-DIVIDEND STOCK:—

1 Bassett.	1 Condurrow.	1 Margaret.
1 Boscawen.	1 Drake Walls.	1 South Wales.
1 Buller.	1 Ding Dong.	1 South Wales.
1 Bassett.	1 Great Work.	1 Transport Consols.
15 Northdown Consols.	10 Kitty.	10 Trefusis.

NON-DIVIDEND.—

1 Clijah and Wentw., 2s.	50 Kelly Bray, 2s.	50 Wheel Uny, 2s.
1 Cook's Kitchen.	10 Lady Bertha, 1s.	10 Lady Bertha, 1s.
1 East Bassett.	10 Rosewarne & Herland.	10 Wheel Trefusis, 2s.
1 East Bassett.	10 So. Condurrow, 4s. 6d.	10 Wheel Tamar, 2s. 6d.

WANTED.—50 North Down, 50 East Tamar, 50 Portkellis United, 20 Trefusis,
5 Wheel Reeth, and 25 Balmora, for immediate cash on delivery of transfer.

Mr. Branchley has to observe, that when the important and unexpected further
rise in the price of tin and copper shall be generally known, a considerable demand
must ensue for shares in mines producing those ores; and it can be confidently an-
ticipated that they who effect their investments without delay will have the gratifica-
tion of seeing a speedy advance in the value of their properties. The time has
arrived for the smelters, who have effected, by their combination, the past depression,
to meet their just reward, by being compelled to give that fair return for the metal
to which both the miner and adventurer are entitled.

Mr. Branchley has facilities for furnishing reliable information of those mines
most likely to prove advantageous for investments, and will furnish such on a per-
sonal interview being accorded.

TIN MINES.—Mr. PETER WATSON, having for years held the
office of secretary to a large tin smelting company, and had a long experience in
the Metal Market, is of opinion that the price of tin, notwithstanding the advance of
£10 per ton, which has already taken place during the past week, a further advance
of £10 per ton can confidently be anticipated, hence the security to those purchasing
shares at present market prices. The dividend mines will increase their profits, and
some of the progressive mines soon be in the Dividend List. A selection, however,
should be made with great care in mines where the reserves are being increased, and
not diminished.

PETER WATSON, English and Foreign Stock, Share, and Mining Office,
57, Threadneedle-street, London, E.C.

Office hours Ten to Five, and Ten to Two on Saturday.

WANTED.—North Levant, Providence, Margaret, Margery, Carn-
youth, South Caradon, West Bassett, Pendern, Kitty (Lelant), Balmora, Le-
ant Consols, and Trefusis Consols. Ma. LELANT, Share Dealer.

4, Cushion-court, Old Broad-street, July 24, 1857.

TO CAPITALISTS.—RELIABLE INFORMATION may be
obtained on application to the undersigned, in respect of MISCELLANEOUS
SECURITIES generally. BANK, INSURANCE SHARES, LAND COMPANIES,
MINES (British and Foreign), RAILWAYS, FOREIGN STOCKS, and the PUBLIC
FUNDS BOUGHT and SOLD at the closest market prices, and at moderate com-
mission. References given and required. JOHN BATTERS, Stock and Sharebroker.

26, Throgmorton-street, London, E.C.

MR. R. TREDNICK, BROKER AND GENERAL DEALER,
GRESHAM HOUSE, OLD BROAD STREET, LONDON.

JOHN GLEDHILL AND CO. MINE AGENTS, SHARE
BROKERS, AND GENERAL DEALERS.

MINING RECORDS OFFICE, 7, SOUTH PARADE, LEEDS.

Mines well selected are the best investments, paying from 15 to 30 per cent. on the
outlay. They have to OFFER SHARES in most of the DIVIDEND and PRO-
GRESSIVE MINES, and are ready to give every information relative to all mining
matters.—Dated July 24, 1857.

MINING SHARES FOR SALE.—

10 AM. Con., 117½.	1 Gonsamena, 115½.	1 Margaret, 22½.
10 Bedford United, 57½.	5 Par Consols, 21.	100 No. Wh. Wrey, 7s. 6d.
10 East Russell, 26.	10 Great Alfred, 23½.	1 Granbler, 22½.
1 East Bassett, 24.		

SHARES WANTED.—100 East Russell, 23s. 6d. 50 Grenville, 25s.

25 East Alfred, 25s. 50 South Cuddra, 15s. 100 Lady Bertha, 13s.

1 Margaret, 22s. 100 Great Alfred, 15s. 50 Virtuous Lady, 17s. 6d.

Mr. Wm. MICHIEL, 2, Astin's-court, Old Broad-street, London, E.C.

Mr. Wm. MICHIEL is at present in Devonshire (Tavistock), inspecting a few mines,
but will return on Monday, when he will be prepared to advise his friends interested
in that locality.

WANTED. SHARES in the following MINES, for immediate cash:—

5 Ding Dong.	2 Wheel Margaret.	50 Pen-an-drea.
2 Craddock Moor.	50 Tamar Consols.	25 Ludcott.
1 Rosewarne.	5 West Alfred.	10 Portkellis.
10 North Bassett.	5 North Levant.	2 Trelawny.
5 Par Consols.	20 Northdown.	2 Pendern.
10 Herodfoot.	20 Northdown.	10 Wheel Wrey.
5 Par Consols.	12 Great Wheel Alfred.	1 Boscawen.
2 Kitty (Lelant).	10 Alfred Consols.	1 Boscawen.

And will SELL 50 Wheel Trefusis.

Parties holding any of the above-mentioned shares, may obtain the full market
price for them, on application, personally or by letter, to
GEORGE SPATLEY, 15, Old Broad-street, E.C.

PROFITABLE INVESTMENT FOR CAPITAL.—

BRITISH MINING SHARES are, without exception, the SAFEST and most
PROFITABLE MEANS for the INVESTMENT OF CAPITAL, in small or large
amounts. Dividend Mines pay 30 per cent. per annum, and Non-Dividend
Shares often advance to 500 and 1000 per cent. profit on the outlay.

HENRY GOULD SHARP receives the earliest information relative to all the
latest improvements in the mines, and consequently can give the best advice, and
recommend to parties seeking safe, profitable, and bona fide investments those shares
which are certain to advance in price. Every information given personally, or by
letter, and a list of the most promising mines, with market prices attached, for-
warded on application to HENRY GOULD SHARP, Mine Sharebroker.

P.S. All country communications will be promptly attended to. Shares of every
description bought and sold, and investments secured from 25 and upwards.

GEORGE MOORE, DEALER IN MINING SHARES,
1, CROWN COURT, THREADNEEDLE STREET, E.C.
In any business that GEORGE MOORE is favoured with, in which he is the buyer, he
will give CASH ON RECEIPT OF TRANSFER; and will allow any purchaser of
undoubted respectability to have shares registered, and receive certificates of same,
previous to payment.

**MESSRS. J. J. REYNOLDS AND SON, STOCK, RAILWAY,
AND MINING SHAREBROKERS, No. 1, ROYAL EXCHANGE BUILD-
INGS, LONDON, E.C.,** beg to call the attention of their friends and investors gen-
erally to the present state of the Money Market, which, indicating, as it does, a fa-
vourable change, will, in all probability, give rise to an enhanced value of securities,
and purchases, therefore, at present rates will, in all probability, be attended with
profitable results.

Messrs. J. J. REYNOLDS and Son, having been called upon by several of their cor-
respondents to give net prices of stocks, beg to say that their practice is to give the
market quotations, subject only to the usual commission on purchase or sale, as the
case may be.

MESSRS. POWELL AND COOKE, SHARE DEALERS, &c.,
HERCULES CHAMBERS, OLD BROAD STREET, LONDON.

**MR. JOS. JAS. REYNOLDS, JUN., 68, OLD BROAD STREET,
LONDON.**—BUSINESS TRANSACTIONS in every description of BRITISH
AND FOREIGN MINES; also, BRITISH AND FOREIGN FUNDS AND SECURITIES,
on the usual terms of commission. Being in constant communication with the most
skilful agents in all parts, Mr. J. J. REYNOLDS, JUN., is always in a position to give
reliable information and advice to his clients and friends who may favour him with
orders. J. J. REYNOLDS, JUN., is a SELLER of—

1 Margaret, 22½.	5 North Frances, 111½.	5 Wheel Wrey, 25.
1 South Frances, 230.	5 Great Alfred, 23½.	25 Vale of Towry, 12s. 6d.
1 West Saxon, 2310.	5 Great Fortuna, 24½.	5 Trefusis, 27½.
2 Alfred Consols, 117½.	20 So. Condurrow, 4s. 6d.	5 Edward, 25 13s. 9d.
10 Tincroft, 24½.	25 West Grenville, 4s.	10 Great Badden, 3s. 6d.
1 North Roskell, 23s.	5 East Alfred, 23 3s. 3d.	10 Grenville, 26s. 6d.
3 Wheel Kitty, 23½.	5 North Croft, 23½.	20 E. Rosewarne, 15s. 6d.
3 Par Consols, 221½.	30 North Levant, 23½.	10 Sorridge, 23½.

J. J. REYNOLDS, JUN., is a BUYER of No. Levant, 23½; E. Rosewarne, 15s. 6d., net.

MR. R. LINTHORNE, ENGLISH AND FOREIGN MINING
AGENT, 3, ADAM'S COURT, OLD BROAD STREET, LONDON.

BUSINESS TRANSACTIONS in all ENGLISH AND FOREIGN MINES, and other
SECURITIES, on the usual terms of commission. Information afforded in respect
to Dividend-paying and Progressive Mines.

JAMES HERRON has FOR SALE the following SHARES, at the

prices quoted, and FREE OF COMMISSION:—

5 Alfred Con., 217 3s. 9d.	5 Herodfoot, 27½.	20 Tamar Cons., 25s. 6d.
10 Brynall, 12s. 9d., ex call.	5 Holmbush, 25s. 9d.	10 Trefusis, 27½.
5 Belling Well, 57s. 6d.	20 Lady Bertha, 14s. 3d.	10 Trefusis, 27½.
100 Cae-Crynn, 2s.	2 Margery, 210½.	10 Trefusis, 27½.
Carvannall, 24½.	20 Molland, 1s. 10d.	20 Vale of Towry, 12s. 6d.
20 Cath. and Jane, 10s. 9d.	3 North Bassett, 213½.	1 West Caradon, 113s.
1 Cefn Brynno, 244.	5 Par Consols, 221½.	5 Wheel Uny, 24½.
20 Chanceryville, 4s. 6d.	5 Portkellis, 23.	1 Trelawny, 23s.
1 Clijah and Wentworth, 25½.	1 Rosewarne, 232.	5 Wheel Wrey, 25½.
10 Dyrke Wall, 25.	25 Silver Valley, 17s. 6d.	5 Wh. Kitty (St. Agnes), 24 15s.
10 Dyffryn Castell, 19s.	10s. call paid.	
25 East Russell, 24s.	2 South Ellen, 24 19s.	1 Wheel Margaret, 271.
20 Gawnion, 17s. 6d.	1 South Caradon, 2337½.	5 Wh. Edw., 25 13s. 9d.
10 East Buller, 21s.	20 So. Condurrow, 4s. 10d.	3 West Bassett, 232.
4 East Wh. Rose, 27 17s.	1 South Frances, 232s.	10 West Alf. Cons., 232½.
10 Great Newas, 10s. 6d.	10 St. Aubyn and Grylls, 30.	5 West Par Cons., 23s. 9d.

Mr. HERRON is satisfied he cannot offer a better selection to the public than those
mines lately advertised by him—viz., Wheel Margaret, Trelawny, Mary Ann, Her-
odfoot, St. Aubyn and Grylls, Vale of Towry, Granbler and St. Aubyn, Par Con-
sols, South Caradon, Wheel Kitty (Lelant).

It is fair to presume that money will in a short time become very plentiful; and
capitalists, therefore, should lose no time in directing their attention to the present
depressed state of the mining market, in order to make purchases in well selected
dividend and progressive mines; an investment made under such circumstances can-
not fail to be otherwise than highly remunerative.

2, Adam's-court, Old Broad-street, London, July 24, 1857.

MR. W. LEMON OLIVER, STOCK AND SHAREBROKER,
4, AUSTINFRIARS, CITY.

BUSINESS TRANSACTIONS in HOME AND FOREIGN RAILWAYS, FUNDS,
SECURITIES, BRITISH AND FOREIGN MINES, &c.

**MR. M. W. BAWDEN, MINE BROKER, GENERAL ASSAYER,
AND COMMISSION AGENT, LISKEARD, CORNWALL.**

MINING OFFICES.—Mr. T. CARTHEW, ST. CLARE
STREET, PENZANCE.

MR. W. H. BRUMBY, STOCK AND SHAREBROKER,
1, QUIET STREET, BATH, is in a position to give the BEST ADVICE in the
SELECTION and PURCHASE of DIVIDEND and PROGRESSIVE MINES.

MR. F. E. BLYTH, MINING SHAREBROKER, No. 1, ST.
MICHAEL'S ALLEY, CORNHILL, is commissioned to SELL SHARES in
most of the DIVIDEND and PROGRESSIVE MINES. As Mr. BLYTH confines him-
self strictly to commission business, the utmost reliance can be placed that all busi-
ness entrusted to him will meet with prompt attention and regularity.

MR. F. LISABÉ, C.E., CONSULTING MINING ENGINEER,
OFFICE, 2, DAME STREET, DUBLIN.

Mr. LISABÉ has to observe, that he is prepared to give his long experience
in Ireland will be found useful to capitalists desirous of investing money in mining
and other speculations in that country.

FRANCIS EVANS, INSPECTOR OF MINES AND MINERAL
PROPERTY. Living in the midst of the principal mines of Wales, he is in a
position to advise parties who may have an interest in them.

He has also visited the Malay Peninsula, and inspected the whole Straits tin mines,
and can give every information, not only respecting the mines, but also the mode
adopted in buying, smelting, &c., at Singapore and Penang.

D. MICHIEL and BOWEN, 2, Astin's-court, Old Broad-street, London, E.C.

Dated Goginias, Rhayader, July 25, 1857.

TO THE SHAREHOLDERS IN THE WORTHING AND
LADY BERTHA MINING COMPANIES.

GENTLEMEN,—At the next meeting of shareholders you will be called on to elect a
successor to your late secretary; and I take the liberty of soliciting your vote in fa-
vour of the application which I have sent in to your directors and committee of
management.

In presenting myself as a candidate for the appointment in question, I beg to ob-
serve, that my professional business is the management of mines, in the capacity of
secretary, under the direction of a committee of shareholders or board of directors.

To this I exclusively devote myself. I have never frequented the Mining Market,
and am entirely unknown there as a buyer or seller of shares. With all other de-
partments of mining business I am, from long experience in the mining districts,
well acquainted, and make it my object, not only to conduct the affairs of a mine sys-
tematically, but to make them open and transparent to all concerned, by presenting
full and detailed statements.

I am willing to engage not to hold any shares in the mines, or to deal in them in
any way.

I am prepared to offer security for the right application of all moneys that pass
through my hands. I am, Gentlemen, your obedient Servant.

5, Waterloo-place, Pall Mall, July 24, 1857. J. DICKINSON BRUNTON.

TO THE SHAREHOLDERS OF THE NORTH BRITISH
AUSTRALASIAN COMPANY.

GENTLEMEN,—I beg to inform you that, at a meeting of the shareholders to be
held on Monday next, I shall offer myself for one of the auditors, should they be
then elected. Being personally known to many of the shareholders, and from long
experience with accounts, I feel well qualified for the office, and with confidence so-
licit the favour of your support on that occasion.

I am, Gentlemen, your obedient Servant, PAUL NINNIS.

6, Queen-street-place, Upper Thames-street, London, July 24, 1857.

MESSRS. A. J. HUTCHINGS AND CO.'S
PATENT IMPROVED WIRE ROPE.

LORDS OF THE ADMIRALTY, THE FRENCH AND TURKISH GOVERNMENTS,
And the principal Colliery Proprietors throughout the kingdom.

MANUFACTORY, MILL WALL, POPLAR, LONDON.

ROUND AND FLAT ROPES of every description, suitable for mining operations
or other purposes, GALVANISED OR UNGALVANISED, MANUFACTURED upon
the newest and most improved machinery, ensuring greater pliability, durability,
and strength; and is admitted by the principal coal proprietors to be far superior to any
other kind of wire rope. The superiority of these ropes over hempen ones, in point
of strength, lightness, durability, and cost, is admitted by all who have tried them.

GUIDE ROPES, SIGNAL CORD, LIGHTNING CONDUCTORS, &c.

Office, 117, Fenchurch-street, London.

MESSRS. T. P. THOMAS AND SON,
MINING AGENTS,
2, CROWN COURT, THREADNEEDLE STREET, LONDON;
AND AT 11, DALE STREET, LIVERPOOL.

Messrs. T. P. THOMAS and Son beg to inform their friends and the public that,
having made arrangements for immediate information of the changes in the appear-
ance of the different mines in Cornwall and Wales, they will be enabled to advise
as to purchases or sales.

Mr. T. P. THOMAS having had 15 years' experience of the market and general man-
agement of mines, and his son having had considerable experience as a practical
miner in Wales and in Cornwall (under Capt. Joseph Vivian, of North Roskell), they
flatter themselves they are enabled to give as reliable information and advice as it is
possible to have, and which they will at all times have much pleasure in giving,
either verbally or by letter.

Messrs. T. P. THOMAS and Son have much pleasure in congratulating their friends
and the public upon the improvement which has taken place in the Mining Market
this week. The advance in the price of tin, and the reported advance in the standard
for copper ore, have made a considerable difference in the price of shares. Margaret
have advanced from 57 to 68, and at that price there is no doubt of a further advance;
it is true the dividend next time will be low, but if, as it is expected, she will pay 2s.
or 2s. 6d. dividends after the next, shares must be a good investment at a much higher
price than 57s. Messrs. T. P. THOMAS and Son would also beg to draw the attention
of the public to East Alfred Consols, shares in which have been done at from 2½ to
3½, leaving off about 3½ to 3 or 3½. This mine has produced between £3000 and
£5000 worth of copper ore, all above adit. The adit has been driven from 60 to 70
fms. through a productive lode, and should the lode prove as good at the 15 as in the
adit, she will soon be a valuable mine. Messrs. T. P. THOMAS and Son, having in-
spected and having daily information as to the progress of this mine, have confidence
sufficient to recommend her as one of the best speculations in Cornwall. When it is
remembered what Alfred Consols, the adjoining mine, has done, what she is doing,
and what she is likely to do, any practical miner will admit that East Alfred is a very
promising and legitimate speculation.

Messrs. T. P. THOMAS and Son intend in future noticing the most prominent and
rising mines of the week; and they also intend giving a short history of the working
and statistics of the leading mines in Cornwall and Wales; and any information
their friends can give them will be gratefully received.

MR. JOHN R. PIKE, MINING AND SHAREBROKER,
having just RETURNED from a TOUR amongst the MINES in CORNWALL,
OFFERS HIS SERVICES to capitalists about to invest in these securities, many of
which are paying from 15 to 30 per cent. per annum.

Mines inspected by the first agents in Cornwall, at moderate rates.

Friday, July 24, 1857, 35, Threadneedle-street, City.

WILLIAM MARLBOROUGH, MINING AGENT,
(For many years with Mr. T. P. Thomas),
57, OLD BROAD STREET, LONDON.

MR. WILLIAM MOORE, STOCK AND SHAREDEALER,
11, HERCULES CHAMBERS, OLD BROAD STREET.

N.B. Business transacted in every description of stock and shares.

JAMES H. COCK, MINE SHAREBROKER, GENERAL
COMMISSION AGENT, AND ACCOUNTANT, REDRUTH, CORNWALL.

Orders for the PURCHASE and SALE of MINE SHARES, MINING MAT-
TERIALS, &c., promptly attended to.

CAPT. THOMAS DUNN, of TAVISTOCK, undertakes to INSPECT,
REPORT, and SURVEY any MINES or MINERAL PROPERTY in ENGLAND,
IRELAND, SCOTLAND, or WALES. No objection to take the management
of any mine or mines in the neighbourhood of Tavistock.

SHEET ZINC AND SPelter.—Mr. WM. JOHNSTON,
49, MITCHELL STREET, GLASGOW, AGENT for the SILESIAN SPET-
ER and SHEET ZINC. Stocks generally kept in Glasgow, Leith, and Hull. Can
ship direct from Stettin or Hamburg to London or Liverpool with promptness
on best terms.

EIGHT HUNDRED AND SIXTY-SIX SHARES in NORTH
GRAMBLER MINE TO BE SOLD, at 7s. 6d. per share. This mine is sit-
uated in the parish of Redruth, and parallel with Granbler and St. Aubyn, which is
now paying dividends. A shaft has been sunk on a splendid lode, which is from 4 to
5 ft. wide, producing beautiful gossan, and there is every prospect of it becoming a
first-rate speculation.—Direct, or apply, to THOS. KING, 19, Old Broad-street, City.
Approved bills will be taken at three and six months.

MINING SHARES (LIMITED) FOR SALE in one of the most
valuable LEAD MINES in FLINTSHIRE.—For further particulars, apply
to Mr. MANDEVILLE, 35, Great Winchester-street, E.C.

WANTED, by a YOUNG MAN, a SITUATION as ASSISTANT
ENGINEER or MECHANICAL DRAUGHTSMAN. He has had five years'
experience as draughtsman, and three years as assistant engineer, in one of the
largest ironworks in the kingdom. Unexceptionable references and testimonials.—
Address, "L. C.," Post-office, Merthyr Tydfil, Glamorganshire.

WANTED, an ENGINEER, capable of taking the MANAGE-
MENT of COPPER MINES in the EAST INDIES. The remuneration will
be a salary of about £2000 per annum, and a share in the profits.—Apply, post paid,
to "Box O. 1," Post-office, Liverpool.

HEILMAN'S PATENT FURNACE.—WANTED, SEVERAL
LOCAL AGENTS for the SALE of the PATENT RIGHT. Respectable and
competent parties will be liberally treated with.—Apply, by post, to Mr. HEILMAN,
at Irchel, Alexander, and Co.'s, 3, Marsden-street, Manchester.

TO CAPITALISTS, AND OTHERS INTERESTED IN MINING.
—To be sold, or worked in company, an extensive and RICH GOLD FIELD,
having a plentiful supply of water and timber; in an excellent climate, situated in
New Granada, South America, which has cost the owner thereof £2383 sterling. A
working capital of £500 will put the property in full order, and make the first wash-
ing! This being a bona fide concern, applicants will please give proper addresses, with-
out which no notice will be taken. Address "Pagarita," Mining Journal Office, 26,
Fleet-street, London.

THE GREAT BARRIER LAND, HARBOUR, AND MINING
COMPANY (LIMITED).—In 10,000 shares, of 25s. each.

Deposit, 10s. per share at the time of application, and 20s. per share upon allotment.

Prospectuses can be obtained at the office, No. 117, Bishopsgate-street Within, London.

FOR SALE, an excellent ROTARY STEAM-ENGINE, 22 and 14 in.
cylinder (Wolfe's Combined), 4 ft. stroke in the outer cylinder, cast-iron frame
and claster for condensing, cast-iron frame and stand for both, fly-wheel 7 tons,
and boiler 10 tons, with a cage for hauling attached.—For further particulars, apply to
Mr. J. H. MURCHISON, 117, Bishopsgate-street Within, E.C., London; or to Captain
GIPFARD, Wheel Crebor, near Tav

REVIEW OF CORNISH AND DEVON MINING ENTERPRISE FOR THE HALF-YEAR ENDING 30th JUNE, 1857.

By MR. R. TREDINNICK,
Gresham House, Old Broad Street, Broker and Dealer in Stocks and Shares.

THE market for Shares in Cornish Mines, comparatively with most securities, manifests considerable firmness and activity; capitalists are now buying for investment, and the enormous quantity of stock recently floating on the market is fast disappearing from the *topis*; this exercises a two-fold advantage for all associated with legitimate enterprise, viz., relief to the needy, with inspired hope and confidence in those already embarked; thus supply is lessened and demand augmented. The position also of the metal market is more satisfactory: Copper is rather than otherwise a shade firmer, yet little change has taken place in the demand for English, although considerable sales of foreign have taken place; Iron, the thermometer of public opinion as regards metals generally has greatly strengthened of late, and more than a fair amount of business has been doing; Lead is well supported, and from prices paid for ores by smelters little apprehension of even a remote decline is entertained by miners; Tin, though depressed, has not varied of late, yet the tone of the market has an upward tendency; it is currently rumoured in well informed circles that English smelters will obtain little if any of the Dutch Tin unless they bid higher than ruling prices at home.

We annex the amount of Dividends paid by Forty-eight Cornish and Three Devonshire Mines during the first half of the current year, with some further statistics in connexion therewith, which cannot but prove the aspect of home mining adventure both healthy and progressive, whilst the fall in current value (in numerous instances) is unmerited and oppressive; returns, profits, and prospects have advanced in the face of receding prices;—this is attributable chiefly to high value of money, political dissensions, and the all but general stagnation in commercial pursuits; circumstances are at present existing unparalleled in the history of this nation—its internal condition is tranquil and prosperous, and relations with foreign powers both friendly and satisfactory—the masses contented, with labour abundant and remunerative, yet alarm pervades all classes,—though the aspect is clear and sunny, gloomy forebodings are heard in every quarter, capitalists grow alarmed, and a terrible lethargy paralyses the vigour and renders negative the enterprising spirit of the people; affluence surrounds us, with strong prospects of an abundant harvest to supply the wants of the poor and enrich the proprietors of the soil; the speculative progress of home industry is, however, totally neglected, especially its mineral products; not a single new company is upon the *topis*, and it is with much persuasion that shareholders are induced to hold, and with much more difficulty are they persuaded to buy at ruling prices, although shares can be purchased in Boscan paying 13 to 14 per cent.; Mary Ann 17 to 18; Trelawney 13 to 14; South Caradon 18 to 19; Kitty Lelant 17 to 18; Margaret 30; Providence 25 to 26; St. Ives Consols 20; Alfred Consols 18 to 19; Par Consols 25; Devon Great Consols and Bedford United each 18 to 19; to say nothing of the vast profits yielded by the many mines in the Buller and Basset district, which have stood paramount in yield and profits for the past, and are likely to flourish in equal prosperity even for a century yet to come; it is, however, with sincere satisfaction that we invite the earnest attention of our subscribers to the subjoined statistics:—

CORNISH MINES.

NAMES.	No. of Shares.	Amount paid per Share.	Price per Share January 1857.	Price per Share July 1857.	Aggregate Divs. 6 mo. ending June 30th, 1857.	Aggregate Divs. 1 year ending Dec. 1856.
Alfred Consols	5120	2 11 10	18	18	8,448	8,704
Basset	512	5 2 6	270	230	12,288	31,232
Botallack	200	91 5 0	160	275	2,600	5,800
Boscan	240	20 10 0	85	95	1,440	2,880
Buller	256	5 0 0	260	240	4,486	23,940
Carn Brea	1000	15 0 0	65	55	4,000	—
Clifford	250	—	550	250	3,500	5,500
Collocombe	2000	10 0 0	20	25	3,000	—
Condurow	256	20 0 0	170	125	2,560	3,840
Ding Dong	672	32 0 0	35	15	672	7,036
Dolcoath	179	257 15 0	210	250	3,580	5,101
Drake Walls	12800	1 19 0	1	2	1,600	1,600
East Pool	128	32 0 0	300	310	1,920	3,200
Fowey Consols	4940	4 0 0	3	7	1,480	3,705
Great S. Tolgus	6000	2 10 0	14	17	1,200	—
Great Work	119	100 0 0	175	140	892	3,867
Grambler & St. Aubyn	243	109 10 0	120	90	486	—
Grylls	1024	0 2 0	—	—	102	—
Jane (Kee)	512	3 10 0	15	30	1,280	—
Kitty (Lelant)	1024	1 7 2	14	20	1,792	2,274
Kitty (St. Agnes)	5000	4 10 0	7	4	750	750
Levant	160	2 10 0	90	100	960	1,280
Margaret	496	19 15 0	40	60	4,032	3,920
Mary Ann	1024	8 0 0	45	48	4,352	7,680
North Basset	6000	nil	37	16	10,500	26,850
Owles	80	70 0 0	300	300	1,440	1,720
Par Consols	6400	1 2 6	22	22	17,920	19,200
Phoenix	200	100 0 0	400	365	4,000	7,500
Polberrow	1000	15 0 0	—	—	3,087	3,295
Providence	560	20 13 2	72	77	5,600	10,080
Rosewarne United	512	12 0 0	45	32	1,792	6,912
St. Day United	20000	2 0 0	—	—	1,500	—
St. Ives Consols	94	80 0 0	105	150	1,410	1,880
Seton	198	107 0 0	185	150	2,079	2,871
South Caradon	256	2 10 0	300	325	7,680	12,288
South Frances	496	18 18 9	360	290	14,880	26,288
South Tolgus	256	16 0 0	150	145	1,280	—
Tincroft	6000	9 0 0	3	3	3,000	4,500
Trelawney	1040	4 10 0	20	24	1,820	1,040
Treweatha	4096	2 0 0	3	2	614	2,457
Wendron Consols	512	23 7 8	30	44	512	—
West Basset	6000	1 10 0	33	29	11,250	23,850
West Caradon	256	20 0 0	140	135	1,792	—
West Damsel	256	10 7 0	90	90	1,024	512
West Providence	1024	5 0 0	13	10	1,024	2,816
West Seton	400	38 10 0	360	300	8,400	13,600
Wrey	4096	1 9 0	8	7	1,433	5,530
Total Divs. for 6 months ending June, 1857					171,457	
Total Divs. for 12 months ending Dec., 1856						294,620

DEVONSHIRE MINES.

NAMES.	No. of Shares.	Amount paid per Share.	Price per Share January 1857.	Price per Share July 1857.	Aggregate Divs. 6 mo. ending June 30th, 1857.	Aggregate Divs. 1 year ending Dec. 1856.
Devon Gt. Consols	1024	1 0 0	435	440	40,960	59,392
Bedford United	4000	2 6 8	7	7	2,500	2,500
Exmouth & Adams	5700	4 14 0	8	7	570	5,130
Total Divs. for 6 months ending June 30th, 1857					44,030	
Total Divs. for 12 months ending Dec. 30th, 1856						67,022

We annex the aggregate expenditure, total dividends, and per centage per annum paid by the Dividend Mines of Cornwall and Devon for the year 1856 and six months of the year 1857 upon the current value of shares this day, specifying the several districts:—

CORNWALL.—ST. JUST DISTRICT. TIN AND COPPER MINES.

NAMES.	Total Divs.	Total Outlay.	Total Current Value.	Divs. p. ct. per annum 1856.	Divs. p. ct. per annum 6mo. 1857.
Botallack	84,550	18,250	55,000	10—11	9—10
Boscan	4,320	4,920	22,800	12—13	12—13
Ding Dong	50,000	21,504	10,080	70	13—14
Levant	170,240	400	16,000	8	12
Owles	17,332	5,600	24,000	7—8	12
Total	326,442	50,674	127,880	14—15	11—12

CORNWALL.—BULLER & BASSET DISTRICT. CHIEFLY COPPER MINES.

NAMES.	Total Divs.	Total Outlay.	Total Current Value.	Divs. p. ct. per annum 1856.	Divs. p. ct. per annum 6mo. 1857.
Basset	240,000	9,624	117,760	26—27	20—21
Buller	218,566	1,280	61,440	37—38	14—15
Carn Brea	237,500	15,000	55,000	—	14—15
Clifford	11,272	—	62,500	8—9	10—11
Condurow	20,992	5,120	32,000	12	16
Dolcoath	166,594	46,137	44,750	11—12	16
East Pool	36,864	3,104	42,340	7—8	9—10
Great South Tolgus	1,950	15,000	102,000	—	2—3
Grambler and St. Aubyn	486	26,608	21,870	—	4—5
North Basset	75,600	—	96,000	28	21—22
St. Day United	1,500	40,000	15,000	—	20
Seton	61,292	21,186	30,000	9—10	13—14
South Frances	126,566	9,393	143,840	18—19	20—21
South Tolgus	18,688	4,096	37,120	—	6—7
Tincroft	49,050	54,000	24,000	18—19	25
West Basset	65,100	9,000	174,000	13—14	12—13
West Seton	32,000	15,400	120,000	11—12	14
West Damsel	5,632	2,650	23,000	2—3	8—9
Wendron Consols	512	11,972	22,500	—	4—5
Total	1,370,264	282,570	1,252,020	13—14	14—15

CORNWALL.—MENHENIOT DISTRICT. LEAD MINES.

NAMES.	Total Divs.	Total Outlay.	Total Current Value.	Divs. p. ct. per annum 1856.	Divs. p. ct. per annum 6mo. 1857.
Mary Ann	28,032	8,192	49,152	15—16	17—18
Trelawney	29,104	4,680	24,960	4—5	14—15
Treweatha	6,757	14,336	10,752	22—23	11—12
Wrey	10,239	5,940	30,720	18	9—10
Total	74,132	33,148	115,584	14—15	14—15

CORNWALL.—CARADON DISTRICT. COPPER MINES.

NAMES.	Total Divs.	Total Outlay.	Total Current Value.	Divs. p. ct. per annum 1856.	Divs. p. ct. per annum 6mo. 1857.
Phoenix	54,500	20,000	73,000	10—11	10—11
South Caradon	121,880	640	83,200	14—15	18—19
West Caradon	75,816	5,120	34,560	—	10—11
Total	252,196	25,760	190,760	10—11	14—15

CORNWALL.—UNY LELANT AND ST. IVES DISTRICT.

NAMES.	Total Divs.	Total Outlay.	Total Current Value.	Divs. p. ct. per annum 1856.	Divs. p. ct. per annum 6mo. 1857.
Kitty (Uny Lelant)	5,090	1,390	20,000	11—12	17—18
Margaret ditto	35,952	8,848	26,880	14—15	30
Providence ditto	34,837	11,569	43,400	23—24	25—26
St. Ives Consols	87,514	7,520	14,100	13—14	20
Total	163,393	29,327	104,380	17—18	24—25

CORNWALL.—VARIOUS DISTRICTS. TIN MINES.

NAMES.	Total Divs.	Total Outlay.	Total Current Value.	Divs. p. ct. per annum 1856.	Divs. p. ct. per annum 6mo. 1857.
Drake Walls	4,800	24,960	32,000	5	10
Great Work	34,820	11,900	16,660	23—24	11—12
Kitty (St. Agnes)	1,500	22,500	20,000	7—8	3—4
Polberrow	17,286	15,000	15,000	21—22	41—42
West Providence	33,369	5,120	10,240	27—28	20
Grylls	102	—	—	—	—
Total	91,877	79,480	93,900	13—14	15—16

CORNWALL.—VARIOUS DISTRICTS. COPPER MINES.

NAMES.	Total Divs.	Total Outlay.	Total Current Value.	Divs. p. ct. per annum 1856.	Divs. p. ct. per annum 6mo. 1857.
Alfred Consols	88,360	13,269	92,160	9—10	18—19
Fowey Consols	210,793	20,480	34,580	10—11	8—9
Par Consols	193,920	7,200	144,000	13—14	25
Rosewarne United	16,640	6,144	16,384	42—43	21—22
Total	509,713	47,093	287,124	13—14	20—21

CORNWALL.—LEAD AND SILVER MINES.

NAMES.	Total Divs.	Total Outlay.	Total Current Value.	Divs. p. ct. per annum 1856.	Divs. p. ct. per annum 6mo. 1857.
Jane (Kee)	3,328	nil	15,360	—	16—17

DEVONSHIRE.—COPPER AND LEAD MINES.

NAMES.	Total Divs.	Total Outlay.	Total Current Value.	Divs. p. ct. per annum 1856.	Divs. p. ct. per annum 6mo. 1857.
Devon Great Consols	581,632	1,024	450,000	13—14	18—19
Bedford United	38,500	9,393	28,000	9	18—19
Exmouth and Adams	13,529	26,790	42,750	12	2—3
Total	633,661	37,207	520,750	12—13	16—17

ADDENDA.

DISTRICTS.	Total Divs.	Total Outlay.	Total Current Value.	Divs. p. ct. per annum 1856.	Divs. p. ct. per annum 6mo. 1857.
CORNWALL.					
Buller and Basset	1,370,264	282,570	1,252,020	13—14	14—15
St. Just	326,442	50,674	127,880	14—15	11—12
Menheniot	74,132	33,148	115,584	14—15	14—15
Caradon	252,196	25,760	190,760	10—11	14—15
Uny Lelant & St. Ives	163,393	29,327	104,380	17—18	24—25
Various (Tin Mines)	91,877	69,487	93,900	13—14	15—16
Various (Copper Mines)	509,713	47,093	287,124	13—14	20—21
Lead and Silver Mines	3,328	nil	15,360	—	16—17
Total	2,791,345	538,052	2,160,008	13—14	15—16
DEVONSHIRE.					
Copper Mines	620,132	10,417	478,000	12—13	2—3
Lead Mines	13,529	26,790	42,750	12	18—19
Total	3,415,006	575,259	2,680,758	13—14	16—17

During the past six months, forty-eight Cornish mines have divided profits amounting to £171,457 equal to £342,914 per annum upon an aggregate expenditure of £538,052, equal in fact to 63—64 per cent. in one year upon the capital embarked therein; these mines command a market value of £2,160,008, or a premium of above 300 per cent., whilst dividends from the commencement have been received amounting to the enormous sum of £2,791,345 12s., being 518—519 per cent. in addition; thus £1,000 embarked at starting would have realised upon average success about £9,200, paying (at the present moment) in two-monthly or quarterly dividends an annuity of £1,380, or 138 per cent. per annum. The three Devonshire dividend mines contrast even more favourably in regard to outlay, dividends, and market value, arising from the fact of Devon Great Consols alone having yielded profits of £581,632, with a market value of £450,000 upon the trifling expenditure of £1,024; enormous as the current value of this property is, it continues to pay in two-monthly dividends, 13—19 per

cent. per annum; the sum of £40,960 having been divided amongst the fortunate shareholders during the past 6 months. The Buller and Basset district average upon the market value of nineteen mines for the year 1856, 13—14 per cent. per annum, and for the six months ending 30th June last, 14—15 per cent. annually; the nineteen mines in question have called up the sum of £282,570; and command a market value of £1,252,020, to which must be added dividends amounting to £1,370,264, which have been divided up to the close of June last; consequently profits averaging 918 per cent. is shown in favour of this district; it being the first for copper in Cornwall; it stretches from Camborne to Gwennap, and embraces the three other parishes of Illogan, Redruth and Wendron, forming an area of six miles in length by five miles in width. The strata granite and killas (or clay slate) being most uneven in formation; at places the granite crops out to a considerable elevation, whilst at others, it dips very many fathoms below the level of the sea. Copper and tin have been found abundantly in both, but the larger and more profitable deposits are embedded in the granite, which indeed would appear essential to the existence of copper, as no profitable vein of that metal has yet been discovered so distant as three miles from it. The country is subject to frequent interruptions and hard heads of ground, which generally run in a northerly direction. Ironstone is also very prevalent, especially in the killas or clay slate, whilst numerous cross courses and elvans traverse both; the former usually north and south, and the latter about east and west. The clay slate varies in depth from a few feet, to upwards of 200 fathoms, and our forefathers were the first to mine in it for that hidden wealth which every day continues to disclose; it is softer in its nature, and more easy to explore. The veins which produce the ore vary in each instance, both in thickness and direction, being denominated east and west, and counter lodes. The whole district possesses innumerable peculiarities and characteristics which, until a few years ago, were very imperfectly understood by the best of our practical miners; hence the loss and disappointment that formerly arose to those who embarked in such pursuits; the aid of science and experience have done much to avoid these errors for the future, and I believe that no further exercise of judgment and caution is now necessary in mining than in the ordinary affairs of life; capitalists should embark their money in dividend mines, or sound progressive ones, or otherwise they deserve to lose their money; it is no use mining without the elements of success, and it

Wheal Vor, formerly a very productive, and at one time a profitable mine, with the Polberron and Kitty, in St. Agnes; Drake Walls is also an important property, and well managed; West Providence is all but exhausted, whilst Grylls is almost too insignificant to be classed amongst the dividend properties. Jane, in Kna, yields silver, lead, and manganite, and pays upon the current value of shares from 16-17 per cent.; the continuance thereof is, however, very precarious, and we cannot recommend the property to our subscribers otherwise than as a very hazardous adventure; great success or total failure may result, without any very considerable further expenditure.

The Copper Dividend Mines of Cornwall, with the exception of the subjoined four, viz., Alfred Consols, Fowey Consols, Par Consols, and Rosewarne United, with Levant and Botallack before referred to, are restricted to the Buller and Basset and the Caradon districts; the former of which is by far the most important and lucrative of the two. Having already entered somewhat into detail as regards the Buller and Basset district, we now refer to the Caradon Mines; these upon an aggregate outlay of £25,760 have paid in dividends the sum of £252,196, and command a market value of £190,760, upon which sum the two monthly dividends amount to 14-15 per cent. per annum, against 10-11 per cent. for the year 1856, thus showing a very healthy and prosperous position. During the past six months, Phoenix shares have fallen from £400 to £365, West Caradon £140 to £135, whilst South Caradon has advanced from £300 to £325. The total expenditure did not exceed £640 upon the latter against div. of £121,888, and a market value of £83,200, which gives profits of £39,043 upon £100 originally invested, yet the works were abandoned by a London company, with remarkable evidences of mineral wealth at the time existing; in the same locality are the following two progressive mines worthy attention, viz., Craddock Moor, and Gonaenna. As regards the other four copper mines, three of them are remarkable instances of mineral wealth, viz., Alfred Consols, Par Consols, and Fowey Consols, though Rosewarne United is fast becoming exhausted. The latter mine in the year 1854, discovered a shallow bunch of ore in the gozian, and the price rapidly rose to £200 per 256th share; at that time we were bold enough to question the permanency of the deposit, and great censure was lavished in consequence; a few months, however, tended to prove the accuracy of our prognostications, and the deposit of ore was unbottomed; the outlay has been £6,144, and the divs., 1855, £7,936; 1856, £6,912; and six months of 1857, £1,792, whilst in another year they will cease altogether. Copper Bottom, in the same locality, yielded about twenty years ago a rich and equally shallow bunch of ore; and although subsequently twice re-worked and abandoned, it is now again being prosecuted under the name of Wheal Hender; the strata is not legitimate, and the bunches of ore are shallow and very superficial—good specimens, but on the whole fewer dividends than calls. Alfred Consols consists of 5,120 shares, £2 11s. 10d. paid, and the dividends up to the close of June, 1857, amount to £88,360, against an expenditure of £13,269; it stands betwixt Herland and Great Alfred mines,—the latter having yielded profits of £380,000 upon a small expenditure from forty to twenty-five years ago, when it was abandoned; it is being re-worked, with some chance of moderate success again. The length of Alfred Consols sets is 360 fms., and the width from 1,000 to 1,200 fms.; the grant is traversed by several lodes; the one chiefly wrought is intersected by a cross course 120 fms. from the western boundary, and by the great lode 50 fms. further east; the latter has exercised great influence on the lode,—in fact, it can be traced from the north to the south sea, and in its progress has made copper, tin, and lead. The deposit of ore has been about 45 fms. in length, and extended from the 60 to the 140 fm. level, whilst latterly another rich deposit of ore has been discovered east of the cross course; this greatly adds to the intrinsic value of the property: the price of shares, 17 at the close of 1856, have since advanced to 24, closing this day at 17. The divs. for 1856 were £8,704, and for the six months ending 30th June last, £8,448; the interest, therefore, on the value of shares is 18-19 per cent., against 9-10 per cent. for the year closing December last. Par Consols is the most profitable mine in Cornwall, and its returns, both of copper and tin, are immense; the works are vast, both in depth and length, and the field of machinery is complete and extensive. This mine, as well as the Fowey Consols, which adjoins, were originated by the late Thomas Treffry, Esq., one of the most enterprising characters ever associated with Cornish mining enterprise. The capital called up from shareholders in the Par Consols amounts to £7,200 only; the profits to the close of June last reach the enormous sum of £193,920, whilst the market value amounts to £144,000. The interest paid in quarterly dividends equal 25 per cent. per annum, against 13-14 for the year 1856, yet the shares do not advance. Fowey Consols has recently been sub-divided from 494 to 4940 shares. The profits amount to £210,793, and the outlay £20,480, against a market value of £34,580, and the present rate of dividend is equal to 8-9 per cent. per annum; this property must be regarded more as a prize of the past, than a promising adventure for the future. Immense quantities of ores have been extracted, and the works are deep and expensive to prosecute. As regards young and promising copper mines in various districts, not already enumerated, we beg to call attention to West Alfred Consols, Margery, East Alfred Consols, Tolvadden and Angarmack Consols.

With the Lead mines of Menheniot we close our review of Cornish dividend and sound progressive mines, and it is with much satisfaction that we contemplate the healthy, progressive, and profitable position in which they stand; in fact the whole average is at the rate of 15-16 per cent. per annum upon the current value of shares paid in two-monthly or quarterly dividends, and with the single instance of a secretary misappropriating £500, we know of no other fraud in the administration of the affairs of mining property during the period of our review, a position almost unparalleled in commercial affairs. The only lead mines in Cornwall, worked at a profit, are situated in the parish of Menheniot, close upon the Caradons, and it is attributable chiefly to their close proximity to the granite formation, that so few profitable copper mines have been discovered amongst the host of young ones started and partially worked during the past ten to fifteen years. Mary Ann is the most important lead mine in the whole group, it pays 17-18 per cent. per annum upon the price £48 per share; Trelawney pays 14-15 per cent.; Treweaths 11-12 per cent.; and Wheal Wrey 9-10 per cent.; the aggregate profits of the whole four mines during the past six months amount to £8,219 against an expenditure of £38,148. The total divs. to the end of June last amount to £74,132 12s., and the current value £115,584; the average dividends paid two-monthly for the past eighteen months is 14-15 per cent. per annum. Amongst the copper mines, in contrast, the following pay single more dividends than the whole lead mines at work in Cornwall, viz., Alfred Consols, Basset, North Basset, Par Consols, South Frances, and West Seton, whilst on the contrary we cannot refer to any single young progressive lead mine likely to become a great prize, excepting the Carnewas, situate on the north cliff, which sell at the absurd price of 10s. per 4,370th share.

The standard for Copper ores was on January 1st £150 12s. to a produce of 7½, continued to advance throughout the month, when it stood at £162 4s., produce 6½, since that period it has gradually and continuously fallen up to the close of June month, when it ranged as low as £131 14s., to a produce of 6½, thus in the short space of five months a fall of 30 in the standard, or 22-3 per cent. upon the present price has taken place, yet in the face of this depression the profits, during the same time, to shareholders in mines have increased from 13-14 per cent. to 16-17 per cent. in comparison with the year 1856; this speaks volumes in favour of legitimate mining adventure, and the advantages resulting from improved management, scientific appliances, with economical drainage and discharge of ores adds from underground to surface; notwithstanding the stoppage of Great Consols and the suspension of a host of small and ephemeral mines, whose aggregate returns were considerable, the quantities of ores sold for the half year, ending June last, were as follows:—100,727 tons against 206,177 tons for the year 1856; fine copper 6,341 tons against 13,529 tons for the year 1856, and in money £660,971 15s. against £1,241,834 12s. 6d. for the year 1856. The standard during the past six months ranged from £162 4s. on January 29th to £128 8s. on June 11th, being on January 1st, £150 12s., and at the close of June last £131 14s., against which we have in the year 1856, £134 6s., and produce 7 April 10th; £127 6s., and produce 6½ June 26th; £122 18s., and produce 7½ August 7th; £131 2s., and produce 6½ September 18th; £128 6s., and produce 6½ October 23rd; and £131 18s., and produce 6½ November 20th; consequently the miner has no reason to complain of low prices, especially when we consider the high value of money, commercial depression, and all but total cessation in business at present existing; on the contrary, it should be a source of congratulation to all that we were favoured from December, 1856, to the close of April, 1857, with an average standard beyond any year since that of 1805, when it stood at 167; in fact, the average of the past six months exceeds that of any year since the date alluded to, although, at the close of June last, it ranged 23 6s. below the average of the year 1856; fluctuations will ever transpire, but with increased drive, and

sound intrinsic merit, as now existing in favour of Cornish and Devon Mines, over any other description of investment, shareholders should rest content; public attention must hereafter become directed to it as a profitable medium for capital, and we are much mistaken if the advances during the next six months does not far exceed the depreciation which we so loudly deprecate; *nil desperandum* should be the motto of a miner—hope is the talisman and perseverance the guarantee of success.

R. TREDINNICK, MINING ENGINEER.

Original Correspondence.

THE JOINT-STOCK COMPANIES ACT.

SIR,—Your correspondent "T. T." in last week's Journal, joins issue with me as to the construction of the 4th clause, and the intention of the Legislature, and argues with talent and closeness a special pleader can alone call to aid his views of the case. Now, both of us cannot be right, and I have some confidence that I shall in this letter go far to convince "T. T." of the soundness of my views, both as to construction and intention. "T. T." says, "What language can be stronger, or more explicit, than this—Not more than twenty persons shall after, &c., carry on in partnership any trade, unless they are registered." &c. And then he says, "The question is, do or not these words express a liberty or license, or are they actually prohibitive?" "C. H." says they are not prohibitive; I, on the contrary, say, with you, they are. Now, "C. H." never said these words were not prohibitive; but "C. H." did not take three or four lines only, but the whole clause, and the latter part, I contend, with the former, give the construction I contend for. I rely on the whole clause; your correspondent relies on three or four lines conveniently picked out, and which, read by themselves, can give no interpretation to the whole clause. But if it was intended to make these partnerships illegal, what penalty, I ask, has the statute inflicted?—None. Unless your correspondent is driven to the necessity of arguing that the payment of all the debts of the company is the penalty; and, if this is so, he must admit my construction, as the text-books will show that when a clause of a statute enacts that a certain thing shall not be done, and in the same clause provides for the consequences that are to ensue if that certain thing is done, this is not making it illegal to do that certain thing, but merely enacting that if a party choose to do this thing the consequences will follow, as stated in the clause. Again, the marginal note to the clause in the Act at once disposes of your correspondent's theory. The marginal note is "Penalty on partnerships exceeding a certain number," clearly contemplating the existence of such partnerships. Would those have been the words if it was intended to make such companies illegal?—Certainly not. The words would have been "prohibition against partnerships exceeding a certain number;" and this is manifest, as by the next clause but one, when it is intended to make an act illegal, the marginal note is prohibition against, &c.

But, Sir, the Government has, through the Registrar of Joint-stock Companies, put an interpretation on the clause, and that interpretation is contrary to the views of "T. T." as I have registered many companies or partnerships (there is no such distinction as "T. T." would draw), and this when such companies had continued business, called meetings, and passed resolutions to be registered under the statute, long after Nov. 3 last, on which day, according to "T. T."s reading of the clause, such companies became illegal, and could not meet and transact business. Yet we find the Registrar admitting their existence as legal, and actually giving them a certificate. Why, Sir, if the interpretation contended for by "T. T." was the correct one, what would have been the reply of the Registrar to the applications to register? this—"By the 4th Clause, on Nov. 3, you ceased to be a legal association, and what you have done since I cannot recognise." I have a right, therefore, to assume that the question as to the construction of the 4th clause (which had been discussed in your Journal long before Nov. 3 last) had been brought by the Registrar to the notice of the law officers of the Crown, before he admitted these companies to be registered. Again, how can "T. T." reconcile his interpretation with the 110th clause, which gives power at any time thereafter for companies to come in and register? This is quite inconsistent with the interpretation of "T. T.;" it is consistent with mine. I could go on, Sir, multiplying instances, which show that the construction I have contended for is the one that is alone consistent with the words of the clause and the spirit of the statute—but I must have regard to your space, and the patience of your readers, many of whom, I doubt not, take but little interest in a question so purely forensic. C. H.

IRON AND STEEL—MANUFACTURE AND TEMPER.

SIR,—It is known to everybody that we live in an age of invention and improvement. To be sceptical respecting the wonders of science and discovery is an error few would wish to incur, but there may be equal danger in expecting too much, and in depending on powers and qualities which Nature never professed, and which Science can never produce. It will be self-evident to your readers that very numerous experiments are now being tried to produce cheaper iron and steel, and the manufacturer as well as the consumer have just reason to anticipate beneficial results. Experiment should always be encouraged, as we owe to it our distinction as a producing and wealth-collecting nation; but it is not possible to spend our skill and capital in those experiments which cannot have a practical application—experiments which take advantage of glorious precedents, such as have introduced the puddling, rolling, and converting of British ore, now capable of being used for purposes which 50 years ago required foreign iron? It is unnecessary to mention the plans at present under consideration which profess to obtain steel from the iron ore without the converting process; but allowing them the success they anticipate, what will be the gain? The price of converting iron is 30s. per ton, subject to discount; in the great majority of cases a matter of barter or exchange in account. How far such a change can be remunerative very little calculation may serve to determine. The introduction of the plan of rolling has been a source of public convenience as well as private wealth; without that improvement the manufactures of the present time could not have been carried on. The forge hammer could not have produced a sufficient quantity of material for our home and export trade, and the extra cost would have been felt in a very important degree.

By some means or other water-power has always been considered requisite for carrying on the tilting business, and though that cannot entirely be dispensed with by rolling, it is only lately that steam hammers have been brought into trial: after the little prejudice which custom has introduced, these will take their place as a momentous improvement, for during a great part of the summer season the water supply is almost useless, but sufficient for generating steam can be obtained all the year round. Some ingenious experimenters are intending to make cast-steel from iron turnings and other refuse. It is true ingots can be made which have the external appearance of refined steel, but the temper will be unequal. Should this material be employed in the production of articles in common use, all the skill which can be exercised will not secure an equal temper on an article with a surface a few inches in breadth, and it will be found that an impossibility to thoroughly amalgamate the particles will cause the metal to have hard and soft places, for which there is not a remedy to be found, but that of a recurrence to the old plan of manufacture. It is very well known that bread should be made of good wheat flour, but some people have introduced peas, plaster of Paris, &c.; they have made cheaper bread by such means, but they have not introduced an improvement. I have no doubt some of your readers are willing to invest their capital in these new operations, and therefore I wish to show them the chances of failure which nature and experience has recorded against them. At the same time, I am convinced that there is a wide field for profitable investment in the steel and iron trade of this country.

July 23.

ON THE GASES OF COAL MINES.

SIR,—In reply to your correspondents, "A.," "P. B.," and "M. F.," I may state that the sciences of electricity, chemistry, and mechanics (Euclid, Resultants of Forces, and Politics) are of comparatively recent date, and the little knowledge of chemistry which our forefathers possessed is seen in the improper names attached to chemical substances. Hydro-chloric acid is an established misnomer; no such substance exists. Muriatic acid is oxy-chloric acid. Chloric acid (a bleaching liquid) is sometimes called hydro-chloric acid by workmen, and is not at all explosive, being destructive to vegetation, whereas chloric acid is a manure. Oxygen, the healthy gas of the atmosphere, is the principal feature and constituent of muriatic acid, and its little quantity of hydrogen is necessary to the existence of muriatic acid. Though it is not my intention to criticise the imperfect knowledge of our "old chemist," yet he is altogether mistaken and misinformed throughout the second paragraph, and a manu-

facturing chemist will soon relieve him of the mistake. The compounds of muriatic acid are thus explained, dispensing with figures:—Muriatic acid = oxygen, a little hydrogen, and oxygen again. Acid means oxide, which again means oxygen, and a little of a metal which is necessary to the existence of oxygen as a substance; thus, oxide of iron = iron rust. By having a little hydrogen in the first place united to oxygen, it renders the acid lighter—that is, more volatile, and more useful. The gases in mines are united together by heat (latent or artificial), light, or electricity. (See *Mining Journal* of July 4, on the "Manufacture of Muriatic Acid.") Muriatic acid gas combines in the dark, because it has very much latent heat, and quickly melts ice; but cold water will not absorb ammoniacal gas in the dark, because ammonia has very little latent heat. Muriatic acid is manufactured from salt, and the additional quantity of oxygen is added by putting peroxide of manganese into the salt. The invention which I have spoken of is divided into three parts:—Muriatic acid gas, or oxygen, with a little hydrogen to render it portable as a substance. Oxygen, the "master" of gases, is the desideratum, neutralising or absorbing unhealthy gases, the atmosphere being more healthy, and a person who breathes a little more oxygen than ordinary is lively, and his blood and cheeks ruddy. Surely it is this gas that is wanted in collieries, or why go to the surface, or "bank," of the mine, or go home, when they feel a choking sensation? The answer is, there is more oxygen (which prevents all explosions) at the bank than at the bottom of the mine. The gases spoken of are in want of the "master" of gases (oxygen), and that which attacks all unhealthy gases. To afford oxygen to the miners is the end or motive of draughts and ingenious plans of working, but the oxygen is adulterated or diluted in the atmosphere with 56 per cent. of nitrogen, which is already so abundant in mines.

In mines of ammoniacal gas, or disagreeable but unexplosive gases, the electric current, especially as named in my specification, is sufficient alone, electricity combining the gases together, as lightning does the atmosphere, "leaving those gases for which there is not an equivalent." Though for agreeableness and cheerfulness of miners muriatic acid is beneficial, the combination of the gases in mines is hastened by a gentle electric current passed through the mine, which probes the mine at the same time, so that muriatic gas is to be used before it is proved. In rich and large workings, where there is much hydrogen, the muriatic acid is additionally oxygenised by more peroxide (of manganese) being used in the manufacture, but the liquid muriatic acid will require two polar branches of the electro-galvanic battery, or a gentle heat placed beneath the shallow basin of muriatic acid; there is no mistake in two much peroxide (of manganese) into the muriatic acid, only it will require a little more heat or electricity, but this will not be necessary when the mines are well supplied with muriatic acid (not chloric acid). The rays of the sun, &c., are impeded to electricity, and the electric current is also applied to light the mine instead of gas, which lighting by gas precipitates carbonic acid gas, which is choke-damp; whereas the light of electricity aids the gases to combine, and is cheaper than gas, by my improved electro-galvanic battery (see *Mining Journal* of July 4), by which electric light or electric current is obtained gratis—that is, it returns more than its own expenses. The nearer my improved plan of working is obtained, the more agreeable and complete the draughts. Lime absorbs the choke-damp, and emits also oxygen. The effect of chloric acid (sometimes called hydro-chloric) in the atmosphere on ammoniacal gas is similar in a mine, "leaving the gases for which it has no affinity" (super-hydrogen and carbon), which two latter gases are absorbed by fresh muriatic acid and lime. By diligence in these arrangements, the bottom of a mine is as healthy, pleasant, and systematic as on the bank.—*Bolton-le-Moors, July 22.*

JOSEPH JONES.

WALLER MINING COMPANY.

SIR,—Your Journal of May 23, contained a report of a meeting of the Waller Mining Company, at which a statement was made by the directors, which I have not read, but which was to the effect that "I had pledged at my bankers a large number of the company's shares;" thereby obviously charging me with having misappropriated certain shares for my own use, and in fraud of the company. One or two "candid friends" among my learned brethren of the Northern Circuit have given, no doubt from the purest motives, increased currency to this assertion, which induces me to request you to insert the present letter; otherwise I should regard the statement as quite unworthy of my notice.

The simple fact that no resolution was moved at the recent meeting on the subject of the above statement shows that the shareholders did not agree with the views of the directors. Upon my retirement from the chair of the company, at a general meeting held on March 31, 1856, I fully and minutely explained to the shareholders my position, and to the number of my shares then at my bankers, my brokers, and elsewhere, and my claim as mortgagee and otherwise over other shares in their or my possession. My explanation was received with loud applause, as manifesting the faith I had in the concern, and the sacrifices I had made for its welfare, and a warm vote of thanks was unanimously passed for my services to the company.

I beg to say that I unequivocally deny the truth of the statement above referred to; that I am prepared at any time to prove the perfect bona fides of any conduct of mine in connection with those or any other shares; that the transaction in question was entered into solely for the benefit of the company, in promoting which I pledged my personal credit, and my own property—not theirs. Permit me further to say that when my claim, admitted by the company for advances made for their use, has been met, I shall only be too happy to hand over any shares they may allege to belong to them, waiving all question of forfeiture or other right on my part.

With this denial, I dismiss the matter, leaving the new directors, if they think they can establish their title, to appeal to a court of law or equity; and in the meantime, as they gave me no notice of their intention to make the charge, I shall certainly not refer their inaction or hesitation to any feeling of forbearance or generosity towards myself.—*Durham, July 21.*

WM. DIXIE STYMOU.

THE ANGLO-CALIFORNIAN GOLD MINING COMPANY.

SIR,—I was an unfortunate shareholder in this company, and I answered all the whips that the directors from time to time applied, until Aug. 1, 1856, when a meeting of the company was held, at which it was proposed and seconded, and carried unanimously, that the property and effects of the company should be offered to the directors, upon condition of their taking upon themselves the liabilities of the company. I duly received a notice thereof, requesting an answer, which was enclosed, and which I signed and returned, to the effect that I was willing to assign all my shares and interest in the company to the directors, upon their taking upon themselves all its liabilities. Time rolled on, and I considered myself no longer a shareholder, so much so that had the golden visions of the directors been realised I could not have claimed any benefit therein; but on April 27, 1857, I received another notice, stating that the directors had been insured, and more money was wanted, but that the directors were willing to take upon themselves the responsibility of carrying out the new company, provided they had the prompt support of the shareholders. Of course, I took no notice of the letter of the 27th. A meeting, I find, was afterwards held, at which it was resolved to dissolve the company, and I have since received a notice that liquidators have been appointed, and my name inserted in the list of contributors as a shareholder. Now, Sir, I wish to know in what position I stand? Am I a shareholder or not? I contend that I ceased to be so after my answer, agreeing to give up my shares to the company, and the directors on their taking upon themselves the liabilities. There must be many other shareholders in the same position as myself, and I have addressed these lines to you, in hopes they may be read by them, and that we may take such steps to resist the payment of any further calls as we may be advised.

July 23.

A SHAREHOLDER.

CORNWALL AND CARDIGANSHIRE.

SIR,—In reply to Mr. Battye, I have first to tell him he was wrong in attempting to knock his brains out by running against a gate-post. Probably if he had shown he had good speculations in Wales his friends would have been induced to carry them out, but to attempt to show them as superior to Cornish mines was foolish indeed.

As to his figures, they have not the slightest tendency of disproving mine, taking your Journal as a guide. He attempts to prove that the Welsh Potosi figures are fictitious, shown only to deceive a generous public. If such be the case, it is a good caution for them to be aware of the projects of Welsh mines. He again says it is only right to add 100,000, for Cwmystwith more than is shown in your Journal, but what right he has to assume that I do not know. Mr. Battye should have made these additions at first, instead of attempting to use questionable language. I cannot allow an alteration of my figures on such vague statements, yet if I permitted the adding of 100,000, more to Cwmystwith, I could bring forward Treavean, and 50 other mines, to bear me out, which would still keep your correspondent where he has always been—"in the back ground."

Respecting East Wheal Russell, I have before told him I never was underground in that mine until within the last few weeks, but a sight of the gossan drawn to the surface through the engine-shaft was quite enough to convince practical old men, that no large deposit of yellow sulphuret of copper would be found there; and no improvement was ever found to take place in this mine until they had driven a considerable distance east, where they fell in with another lode.

If your correspondent will place 50, in any bank, I will furnish him with the result of East Russell, and allow the money to remain until my opinion is tested. I am strongly of opinion that Mr. Battye is connected with the person who twice reported on East Russell, and pronounced it to be a certainty, and a second Devon Great Consols; at the same time attempting to depreciate the reports of practical men, who the truth was he had never been one foot down the ladders of the mine, nor has he up to the time. This is the class of persons who damage the cause, by receiving the money of shareholders for work never performed, but furnish a favourable report that will for the time please, until the speculator, in the end, finds how he has been misled by false statements.—*Wiveliscombe, July 21.*

NICHOLAS ENTHOU.

RUINOUS CONSEQUENCES OF THE NON-PAYMENT OF CALLS EXEMPLIFIED.

SIR,—In the third leader of the *Mining Journal* of July 18 you give a capital and truthful description of the ruin of many properties by the non-payment of calls when due; a fatal instance of this has lately occurred near this place on two occasions in the same mine, though the mine itself is admitted by all judges who have seen it to be a valuable property, containing many known lodes, from the upper parts of which rich stones of copper ore have frequently been taken; considerable quantities of work have been done; an adit level has been driven 400 fms.; several shafts sunk from a surface, one to the depth of 30 fms. below the adit, or 53 fms. from surface. From a north and south lode thousands of tons of iron ore have been raised and sold at a profit; in doing this, not only were the companies draining their mine, but were actually advancing their level towards two east and west copper lodes, which would be unwatered to the depth of nearly 30 fms. by the long adit. Such was the state of affairs, when the non-payment of calls by some, the bankruptcy of others, and the grinding exactions of certain of the lodes, caused the mine to be stopped. The miners placed their claims in the Stannary Court, out of which it was purchased by a gentleman, with all the machinery, for a sum not exceeding the value of the old iron on the mine; by him a new company was formed, and the mine transferred, at an advance in price of only about 1000, to cover expenses, interest of capital, &c. The company at the time were considered first-rate, and were men of known property and standing. Vigorous measures were adopted, the sett enlarged, a valuable vein of copper discovered, out of which some tons of rich ore were raised; hundreds of tons of iron were sold from the levels driving north to intersect the two east and west copper lodes; a new shaft had been sunk and timbered to 4 fms. below the adit level, to facilitate the working of these important east and west veins; and everything apparently progressing as well as could have been desired; capital and labour and property machinery had been created, and steam-engine was about to have been placed. Thus stood the mine,—about one-half of the subscribed capital had been expended, the mine was in a fair state of being rapidly and cheaply developed, the hard and costly

work being done, when suddenly an order was issued to suspend operations. This was subsequently found to be in consequence of the treasurer not being able to get in his cash, or rather instalments of capital; fortunately for him the mine was but little in debt. Some pleaded inability to pay, others had heard the mine was in a bad locality, another that the lode had an iron back, and that he had been induced by his broker to invest in some of his mines; and now, as a climax, they intend to meet to wind-up the affair and sell the plant.

New, Mr. Editor, this is called mining—ruinous consequences of mining! True, it is ruinous; but by whose bringing on, except the foolish adventurers? Who, in this instance, are sacrificing a valuable property, as they will see when too late, for the sett will assuredly be wrought again, and their expenditure be so much absolute gain to Sir Richard Vyvyan and the adventurers who have the confidence and spirit to re-work the mine.

That the neighbourhood is not good nobody knows, as it has never been extensively proved; as far as it has been wrought it is second to none in the country. Under such circumstances this really capital property to be sacrificed. True, again, the committee of management are not acquainted with mining, in theory or practice, and have no one but the captain and his poor fellow, in bound hands and feet by their orders) to counsel them. It is really too bad to think property should be so depreciated by the stupid suicidal proceedings of such parties; better for them, better for mining generally, better for the locality, and infinitely better for the land proprietor, had they never heard of the place, or seen the mine.

It is to be hoped they will see the contents of your paper of last week; it may make them pause and consider the step before it is too late. Still, if they will rush headlong into loss, so be it; but let it not be said by them or by others that their loss has been created by mining. The mine is not in fault; it lies in themselves and their divided councils.—*Rocke, July 21.*

ONE WHO HAS EXAMINED THE MINE.

Meetings of Mining Companies.

NEW WHEEL VOR AND EAST WHEEL METAL MINES.

A special general meeting of shareholders was held at the British Hotel, Cockspur-street, on Monday, Mr. W. P. SCOTT in the chair.

The notice convening the meeting, and the minutes of the last, were read and confirmed. The cost-sheet of the past month was then produced, and passed.

The SECRETARY announced that since the last meeting some transfers of shares to parties in Cornwall had been received by him, and he was directed to enter the same in the transfer book. He also stated that the balance at the bankers rendered it unnecessary at present to make a call on the shareholders.

Mr. DANIELL then informed the meeting that he had the gratification of saying that morning's post brought him accounts of the most cheering character from the mines, and which fully bore him out in his previous representations as to the value of the mineral property in which they were embarked; and he would add that the report referred to bore the signature of parties, to the truth of whose statements he would personally vouch. He thought it would not be amiss to call the attention of the meeting to the extraordinary start in the price of tin, which he had learnt that morning from W. Bolitho, Esq., one of the first smelters in the West. He had pleasure, therefore, in saying that the tinstuff from the shafts of Trueman's and the Great Wheel Vor main lode in their ground would make profitable returns in stamping, even at the present shallow depths, the lodes increasing in value as the shafts progress.

It was then proposed that the secretary should read to the meeting the following report, that day received:—

July 18.—We have to-day inspected the New Wheel Vor and East Wheel Metal Mines, and at the request of your board beg to hand you the following report:—The engine-shaft on the great north lode (the Trueman's lode of Great Wheel Vor) is now down 13 fms., the lode continuing to improve in appearance and production—giving, in fact, every indication of producing an abundance of tin at a very moderate depth. The engine-shaft on the Great Wheel Vor main lode is down 6 fms., where there is as fine a looking lode as could possibly be expected; it is composed of a light cellular ground, intermixed with black stones, having a burnt, or cindery appearance, and large quantities of soft white prisms, the whole impregnated with tin ore, and interspersed with stones of that mineral of extraordinary richness. We never saw such splendid stuff as is now being drawn from it, and it would seem, from the rate at which the lode is widening, that we shall soon be in a mass of it. The ground in which the lode is embedded is of that description which is deemed in this district the most congenial for deposits of tin, being a light coloured killas, striated with stains of iron, and is very favourable for sinking through, so that we are making rapid progress in this operation, and may hope speedily to reach, at an easy cost, the depth at which it may be reasonably expected, from the appearance we have already referred to, to lay open deposits of tin which shall rival in richness those which the same lode has produced in the Great Wheel Vor, adjoining us, which have made this district the richest tin ground ever yet discovered. In East Wheel Metal, the old shaft has been cleared altogether about 150 fms., and we have still 50 fms. to arrive at the first lode. We have been in this respect in meeting with no obstacle of any kind, and have thus got on rapidly; but lately we have met with several shafts very near each other, which were completely full to surface, the levels also being partly filled. We have still to encounter some of these shafts, but nevertheless believe that we shall reach the first lode in about a fortnight. We look on this part of our property as of great importance, as from every account which has been handed down by posterity the several lodes by which it is traversed must have produced rich bunches of tin near the surface; this, indeed, is manifested by the extensive workings made by the ancients, it is, therefore, one of our most important objects to clear them with all possible expedition. At the present time, the engine-shaft on the Great Wheel Vor is at 104 fms., and the engine-shaft on the Great Wheel Vor main lode to six men and three boys, at 67 fms. per fm. The engine-house is rising rapidly, and will be finished in about three weeks. The smithy and carpenter's shops, with yards attached, are completed, the whole being very commodious, and well adapted for their several purposes.

Before concluding our report, we think it right to draw your attention to the general and important nature of the large tract of mining ground comprehended under the name of the New Wheel Vor and East Wheel Metal Mines, which, in our opinion, entitles it to be regarded as the first tin mining settlement yet discovered in Cornwall. It is a fact beyond contradiction that our neighbour, the Great Wheel Vor, has been the richest tin mine ever known, and to the present day continues to be the largest producer of that valuable metal. It is also an established geological fact that the killas rock, which has and is producing such an immense amount of tin in Great Wheel Vor, extends from that mine through the entire length of the New Wheel Vor and East Wheel Metal, forming an enormous belt, between the ranges of granite hills, the western half of which is occupied by the celebrated mine just named, and the eastern half being the ground over which your losses extend. The lodes of this extensive mining field, unexampled in metalliferous wealth, which are at this moment the incentive to the most gigantic mining enterprise of modern times, pass from the Great Wheel Vor into and throughout the entire length of the New Wheel Vor and East Wheel Metal Mines, as do also several other lodes of the same mine, some of which are now exceedingly rich, especially those of Wheel Metal. Trueman's lode now also attracts considerable attention on the part of the directors in the Great Wheel Vor, and it is believed by them that it will prove not an unworthy parallel to their main lode; they have, therefore, commenced driving a cross-cut towards it at a deep level. In conclusion, we can safely assure you that you have in New Wheel Vor and East Wheel Metal Mines, if not the best, one of the best fields for mining pursuits that Cornwall, with its many rich districts, can boast of.—JOSEPH VIVIAN, of North Rocker; W. C. VIVIAN; JOSEPH VIVIAN, JUN.; NICHOLAS THOMAS.

The report, so gratifying in all its bearings, confirming as it did all that the shareholders had been previously led to expect, elicited from them expressions of perfect reliance on the successful result of the undertaking, and their determination to carry it out with all the vigour and expedition which could be applied to the mines.

The SECRETARY then begged to intrude a few minutes on the meeting in saying that, as a Cornishman, he had more facilities, perhaps, than other shareholders in town in learning the real state and value of the property over which their assets extended; and he had learnt from parties of the most unquestioned character, both as to their integrity and mining knowledge, that it was not a matter of doubt or question as to the ultimate results, but that time only was needed in getting down on the lodes to a moderate depth to convince the mining interest that the New Wheel Vor and East Wheel Metal Mines would be the old Wheel Vor resuscitated in all its pristine glory in quantity of metal and dividends to the fortunate shareholders; and, in his opinion, the present company would be long not be second to the renowned Devon Great Consols, nor will they ever be likely to find themselves short of tin.

Towards the close of the meeting, Mr. DANIELL begged to suggest that as it was now no longer doubtful but that these mines would soon become a large and extensive property, and as such would be appreciated by parties who take an interest in mining matters, although the shares at present were fairly held, still it must be supposed that they would occasionally change hands; instead, therefore, of occupying Mr. Braddon's office, Gray's Inn-place, Gray's Inn, as at present, he would submit that the secretary (Mr. Braddon) be instructed, for the convenience of the company, to select offices in a central part of the City.

The proceedings of the meeting having been brought to a close, a vote of thanks was unanimously passed to the Chairman, for his business-like attention to the general interests of the concern.

ROYAL CONSOLIDATED COPPER MINING COMPANY OF SAN FERNANDO, CUBA.

The first general meeting of proprietors was held at the office of the company, Graham House, on Thursday, Mr. WALTER SMITH in the chair.

Mr. YOUNG (the secretary) read the notice convening the meeting, and the report, from which the subjoined is condensed:—

The company was fully registered on July 20, 1886, and early in this year the necessary stores and machinery, together with 11 Cornish miners, an engineer, a smith, and a carpenter, were dispatched by the *San Fernando* sailing vessel to Cuba. The financial affairs of the company in Cuba were placed under the control of Mr. Crawford, Her Majesty's Consul at Havana. A sample of 6 tons of ore had arrived from the mine, assaying with a fraction of 18 per cent. of copper. Mr. Crawford hoped to have a small cart of ore dispatched from Cuba in this or the following month to Swansea. The report concludes by stating that Capt. Gill had resigned, and Mr. Crose had been appointed in his place.

A statement of accounts to the 13th of July was submitted, of which the following is an abstract:—

Capital, 37,000 shares of 10s. each, in purchase of mines	£370,000	0	0
Shares allotted to applicants	15,200	0	0
Debit owing by the company	4,381	9	0
Estimated value of mines	370,000	0	0
Disbursements	15,795	17	0
Cash at bankers and on deposit	£26,435	13	0

The above balance-sheet approximates as nearly to the form prescribed by the Joint-Stock Companies Act as the present circumstances of the company will permit. Owing to the distance at which the company's operations are conducted, and the short time which has elapsed since the working of the mine has commenced, no returns exist from which a profit and loss account can be made up. In the meantime the disbursements necessarily stand on the credit side of the account.

The CHAIRMAN said the agent at Havana, Mr. Crawford, had appointed Mr. Crose in the place of Capt. Gill, who had retired on private information. Prof. Ansted was now in attendance, and would give any information or answer any questions; he had reported that the lodes were regular, and of unusual richness. It was arranged that Prof. Ansted should go out to Cuba soon after the present meeting.

A PROPRIETOR wished to know whether it was probable that they would soon require more capital?

The CHAIRMAN replied, that in round numbers they had in hand £5000, and about 18000. Owing for calls, against which they had acceptances out for £4000, leaving a cash balance of about £4000; and, in addition, they had a cargo of ore coming home of 200 tons, which, if it sold at 17s. per ton, would realise between 3000 and 4000, and the expenses of the mine were not exceeding 500, or 400, per month. He (the Chairman) had no doubt but that they could go on for a year without calling upon the shareholders.

Prof. ANSTED said he went out preceded by two Cornish miners, and after an examination, he made a report, that was nothing more than a simple and perfectly honest statement of the facts as presented to him. The returns he got from the English consul showed that 10,000 tons of rich ore had been taken out, and they had only worked to a depth of 13 or 14 fms.; and as different reports had been given, he felt bound to go out to the mine, and again examine the property. The learned professor explained the nature of the ground; a hard bar existing, which former workers had avoided, although most probably the lode might be found under it.

The report and accounts were then unanimously adopted. The whole of the directors and auditors were re-elected as they were.

The CHAIRMAN said, as soon as they received a report from Professor Ansted, they would either call a meeting or send a copy of the report to every shareholder. The proceedings terminated with a vote of thanks to the Chairman and directors.

ENGLISH AND AUSTRALIAN COPPER COMPANY.

A general meeting of proprietors was held at the London Tavern, Bishopsgate, on Monday, Mr. H. W. SCHNEIDER, M.P., in the chair.

Mr. WILKINS (the secretary) read the notice convening the meeting.

The CHAIRMAN said, it was necessary to adjourn the meeting—an arrangement that was agreed to with the committee of shareholders appointed to confer with the directors. The committee had devoted a great deal of time in investigating the affairs of the company, and required the assistance of a public accountant to go through the accounts, and, in consequence of the time occupied, the committee were not able to make a final report until last Friday, and to consider that document, an appointment was made with the directors for Friday next. Under these circumstances he (the Chairman) had to move the adjournment of the meeting to Aug. 12. It might be satisfactory to state that the prospects had improved, and, according to the report of the committee of investigation, there was every chance of doing well. The funds had increased, and if the ore fetched a fair price they would have a considerable surplus in hand. The accounts would be laid before the meeting on Aug. 12, when the proprietors might deal with the balance as they should deem fit.

A PROPRIETOR said the committee had not emanated from the shareholders, but from the directors, and he should be as much dissatisfied with the report as he was with the one of the last committee.

The CHAIRMAN reminded the meeting that a motion was made for a committee of investigation, and after some conversation it was agreed that it should be withdrawn, and as soon as they received the accounts from the colonies, that the balance-sheet might be drawn, it was agreed that Mr. Routh, who led the opposition, should in conjunction with him (the Chairman) select six of the shareholders to go into the accounts, and it certainly appeared rather curious that he was here not to defend the directors, but the committee whom they had selected, and amongst those gentlemen who were appointed were Mr. Sutton and Mr. Cobbett, two of the principal leaders of the opposition, and who have been assiduously working with Mr. Routh, and he did not see how anything could be conducted fairly.

After some discussion it was agreed to adjourn the meeting to Aug. 12.

CLARENDON CONSOLIDATED MINING COMPANY OF JAMAICA.

The half-yearly general meeting of proprietors was held at the London Tavern, Bishopsgate, on Wednesday, Mr. J. W. CATER in the chair.

Mr. J. H. KOCK (the secretary) read the notice convening the meeting.

The CHAIRMAN said, as the report of Capt. Tregoning had been printed and circulated, it might save time to be taken as read, and confine themselves to reading the report of the directors. (An abstract of the report of Capt. Tregoning appeared in the Mining Journal last week.)

Mr. KOCK then read the following report of the directors:—

Your directors have convened the ordinary half-yearly meeting at an earlier period than usual, in order to place before the shareholders the result of the course they have adopted. At the annual general meeting, held on Feb. 20 last, a resolution was passed authorising the directors, should it be deemed advisable, to send to Jamaica a competent person to report upon the state and prospects of the company's mines. Acting upon this resolution, your directors, after careful enquiry, and consulting with Messrs. Taylor and Sons, selected Mr. Archibald Tregoning, who sailed for Jamaica on April 17 last. This gentleman has returned, and the result of his mission is embodied in the annexed report. It is a source of gratification to observe that the workings hitherto have been conducted in an efficient manner, and that the lode at Stamford Hill is of a nature to induce Mr. Tregoning to recommend that it be tried in depth, by sinking a new shaft to the extent of 70 fms. below the 48 fm. level, which will prove the mine at a depth of 128 fms. from surface. This will entail considerable further outlay both for machinery and labour. Your directors entertain the hope that the result will justify the expenditure. The cash remaining in hand on June 30, inclusive of Government securities, amounts to \$5371. 16s. 7d.

The CHAIRMAN said, the whole of the particulars now being before them, he did not know whether himself individually, or his colleagues, had any remarks to make. Mr. Tregoning was present, and had accomplished what was suggested by the proprietors, when he had the pleasure of meeting them in Jan. last. Finding the progress made at the mines was not so rapid as they could wish, the board had consulted Messrs. Taylor and Sons, whom they considered the first authorities in mining, and asked them if they knew of any party in whom they had the fullest confidence, and could send out to Jamaica. Messrs. Taylor mentioned Mr. Archibald Tregoning, and from enquiries made by him (the Chairman) as to Mr. Tregoning's qualifications, he had no hesitation in sending him out, and the instructions of the board were that he should fully examine the property, and return only when he considered that examination complete. Mr. Tregoning had strictly followed the instructions of the directors, and since his return the report and plans had been submitted to Messrs. Taylor as the most competent parties to officially report upon it, as to whether they approved of his suggestions, and whether any further capital should be expended on the mine. He (the Chairman) was very sorry that Mr. Taylor was abroad, and they had been unable to get an answer; but the directors had received a report from Capt. Harper, which he had got the secretary to read, as it represented some favourable circumstances on which he was unable to give an opinion. However, they had not only Capt. Tregoning here, but in addition the Hon. E. Thompson, who had arrived by the last packet, and as he (the Chairman) felt satisfied that they would have a straightforward and candid statement with two such important personages present to give information, he should conclude by moving that the report be received and adopted.

A PROPRIETOR seconded the resolution.

The CHAIRMAN said he would now call upon the secretary to read the report of Capt. Harper, with the note of Capt. A. Tregoning attached.

Mr. KOCK then read the following report:—

Retreat, June 23.—Stamford Hill: In laying before you my report of the above mine, I beg to say our progress during the past fortnight has been pretty favourable; the lode in the 46 fm. level, north-east of shaft, is increasing in size as we proceed with the driving to the eastward, being at present about 6 ft. wide, consisting principally of dark porphyry, intermixed with iron, spar, mundic, and spots of yellow copper ore. No particular change has taken place in the character of the lode in the 46 fm. level, south-west of shaft; it is about five feet wide, with regular walls, composed of porphyry, flookan, and iron, with occasional sprigs of copper ore. It affords me much satisfaction to inform you the lode in the shaft sinking below the 46 fm. level, is beginning to present the same favourable appearance named in my last report, composed of light coloured porphyry, flookan, iron, and mundic, with occasional sprigs of copper ore; in fact, it is almost impossible to take a stone in hand from the entire breadth of the shaft that does not contain ore; we have a quantity of water to contend with, but I am glad to say the engine is at the mine, and we commenced fixing it yesterday; I therefore hope, if all be well, to see it at work in two or three days. The slopes in the back of 35 fm. level are still producing a little ore. The ground in the 58 fm. cross-cut continues hard for driving through.—F. C. HARPER.

London, July 17.—I consider this report from Capt. Harper very satisfactory, and the continued high promising appearance of the lode in the bottom of the shaft a great inducement for carrying out the trial proposed.—A. TREGONING.

Mr. W. WRIGHT said, if the call were made, and the mine prosecuted with vigour, he should like to know the opinion of the people in Jamaica, as there were many large holders in the colony.

Mr. E. THOMPSON could not pledge himself to the opinion of the holders in Jamaica, although he was in many instances they were in favour of going on.

The CHAIRMAN said he would now call upon Capt. Tregoning to give any explanation. Capt. A. TREGONING said he had so fully explained his views that he could not add anything to the report. What he proposed to do would take 19,300, which was a large sum to lay out, but they were playing for a great stake; it was a most large and powerful lode.

The CHAIRMAN: Do you think any part of the work will help the expense?

Capt. TREGONING:—A few tons might be stowed out, but that would not help much; when they got to the 39 ft. might be some assistance. If he did not think the lode would make in depth, he should not recommend it to be tried.

Mr. HOTES: As sensible men, ought we not to prosecute the enterprise?

Capt. TREGONING thought so; but his opinion was they would not cut the lode until they were down 70 fathoms.

The Hon. EDWARD THOMPSON could not give a very scientific account of the mine, as he did not understand mining, but since Capt. Tregoning was in Jamaica it had improved. He was very happy when he found the directors and shareholders had determined to send out an independent gentleman to inspect and report upon the property, because it might be said that he (Mr. Thompson) was biased—and the same observation might apply to Captain Harper, who was a party who had seen Captain Harper, and watched his operations, would say that he was a most upright and excellent man.

Mr. HOTES said they had the opinion of Capt. Tregoning before them, and if they were to carry on operations, they must place funds in the hands of the directors; but before doing so he should like to hear their private opinion as to the course they would now adopt.

The CHAIRMAN said he must abstain giving an opinion to the board of directors; for himself, he should be ready to pay to the extent of a 10s. call. Their instructions to Capt. Tregoning were to give such an estimate as they could safely lay before the proprietors. If they adopted the report, it was approving of the views of Capt. Tregoning, and the board would make a call to carry on the operations suggested.

The Hon. E. THOMPSON observed, with regard to the new shaft that was to be sunk, it would be commenced from the 46, so that the work that had been done would not be thrown away. Capt. Harper was of opinion that when they reached the 58 fathom level there might be such an improvement that it would pay a considerable portion of the expenses. The lode was 12 ft. wide, and if the ore were rich enough to dress they might calculate the quantity that might be taken out. He considered the probability was that it might pay something towards the expense.

Mr. HOTES wished to know the geographical position of the mine with regard to Wheel Jamaica?

The Hon. E. THOMPSON said he could explain thus far, they were not parallel lodes, but the lode was likely to run into the Charing Cross lode. The distance of their mine from Wheel Jamaica was not one mile, as the crew files.

The CHAIRMAN: Suppose the lode should prove valuable, and found to run in a certain direction, what extent of land have we to work in that direction?

The Hon. E. THOMPSON replied, that the shaft is now being sunk upwards of a mile to the north-east, and to the south-west for several miles to the east, but that was a matter of no consequence, as he had secured a property adjoining the

north-east, and which extended three or four miles. He had only given 1000, for it, and should be happy to make it over to the company at any time for the same amount. Mr. W. WRIGHT said every one he had conversed with on the subject was of opinion that the mine ought to be carried on. He had a large stake in Jamaica, and should like to see mining in the colony thoroughly developed.

The report and accounts were then unanimously adopted.

Mr. W. WRIGHT said he should propose a resolution to the effect that the works be vigorously prosecuted.

The Hon. E. THOMPSON, after a lengthened discussion as to whether the call should be 5s., suggested that 3d. per share would be sufficient in the first instance, and that when it was expended they might be in such a position that if any more money were wanted it would be readily responded to.

The CHAIRMAN promised the subject should have the best consideration of the board. Mr. W. W. WRIGHT then moved the following resolution:—That in the opinion of the meeting it is desirable to prosecute the mining operations at Stamford Hill Mine, as recommended by Mr. Tregoning in his report; and the directors are recommended to take the necessary steps to carry on the works with vigour.

The Hon. H. D. THOMPSON seconded the resolution, which was unanimously carried. A vote of thanks to the Chairman terminated the proceedings.

DUN MOUNTAIN COPPER MINING COMPANY.

The first general meeting of proprietors was held at the London Tavern, Bishopsgate, on Wednesday, Mr. ALEXANDER MORRISON (of Austrifriars) in the chair.

The SECRETARY read the notice convening the meeting, and the report, from which the subjoined is condensed:—

We have now the satisfaction to announce that a mining superintendent and manager of the works, of considerable experience and attainments, and selected among many candidates after an examination by competent judges, has been engaged for a term of three years, and Mr. Thomas Ridge Hackett, the gentleman in question, will, we trust, fulfil our expectations in point of mining and other abilities. He will sail in the screw steamer *Isabell*, and should reach Nelson at the best season for commencing operations. We are of opinion, after much deliberation, that the most practical as well as the cheapest road that can be made for the transport of the copper ore from the mine to Nelson will be a light railway, not requiring locomotive power; consequently, an adequate supply of tools, other materials, and portion of rails, have been ordered, and will be immediately shipped to Nelson, to enable Mr. Hackett to proceed vigorously to work on his arrival, instead of our awaiting his first report, and incurring the great delay consequent thereon. Orders have also preceded him to purchase a convenient piece of land, whereupon to erect storehouses, and also, when required, a shipping wharf. The active co-operation and judicious support to be given to the superintendent, by means of a local committee in Nelson, has engaged much of our attention, and such measures in this respect will be adopted as will, we trust, best meet the requirements of this essential feature of the company's operations. Our Nelson friends were, by the last advice awaiting the result of our proceedings. The financial position of the company will be seen in the annexed duly audited statement. Every preliminary debt is discharged, and the sum of 25,000, remains on deposit in the hands of the Union Bank of London, in addition to the current balance of 1484. 13s. There are 3600 shares to be paid for in New Zealand, which will, no doubt, be readily taken up, and there is a reserve in London of 18,000 shares which need only be issued in the event of further capital being ultimately required.

A statement of accounts, to June 30, was submitted, from which the following is abstracted:—

Proprietors' capital, 75,000 (less reserved shares in colony and London, 23,000)	£52,000	0	0
Interest on deposit account	235	0	0
Purchase of property	£26,000	0	0
Preliminary expenses, &c.	1,394	5	0
Current expenses, salaries, office furniture, &c.	383	10	0
Balance in hand in favour of company	£21,436	19	0

The CHAIRMAN said, although in reality this was the first general meeting of the company, a private meeting was held last month, at which the business was fully discussed. He would, therefore, propose the adoption of the report; and if any shareholder would second the resolution, he should be glad to answer any questions.

The motion being seconded.

A PROPRIETOR said nine miles of road had been made and completed, yet the report now recommended making a railway, and wished to know whether the present road would be available?

The CHAIRMAN replied that the nine miles of road made was only adapted for bullock traffic. It was, in fact, only a bridle path, but would become useful for a railway, if only intended to put down a light rail, which would be the cheapest in the end.

Mr. DUGLAS wished to know whether the present road was level, so that not much engineering work would be required?

The CHAIRMAN replied that the expense would not be very heavy.

A PROPRIETOR wished to know whether any estimate was made of this tramway? Mr. NAPIER observed that the capital was very small, and perhaps the whole of it would be swallowed up by the railway.

Mr. A. MORRISON said, when they had formed the road they would commence making profit at once, as the economical transport of the ores was the only thing they now required.

Mr. FORSTER stated that the rails they had sent out cost 81. 17s. 6d. per ton, and it was estimated the cost would be 50s. per mile, and 5000, for laying down; it was, therefore, calculated that the whole would be completed for 10,000.

A PROPRIETOR said, if it were completed for that amount the board would deserve the thanks of the shareholders.

Mr. STANLEY reminded the meeting that it would cost nothing for timber, as they had plenty of it on their own property.

The report and accounts were then unanimously adopted.

The CHAIRMAN said, at the meeting held in June it was considered desirable that the number of the directors should be increased from five to seven.—A resolution to that effect being carried unanimously, the Chairman, Mr. A. Morrison (Cornhill), Mr. Stanner, and Mr. R. Porter were re-elected; and Mr. A. Rogers, Mr. W. P. Fines, Mr. Deputy Corney, elected as new directors. The auditors were re-elected, and a vote of thanks to the Chairman terminated the proceedings.

THE SCOTTISH AUSTRALIAN INVESTMENT COMPANY.

The half-yearly general meeting of the proprietors was held at the London Tavern, Bishopsgate, yesterday, Mr. W. H. DICKSON in the chair.

Mr. GRAINGER, the secretary, read the notice convening the meeting, and the report, an abstract of which appeared in our Journal of July 18, was taken as read.

The CHAIRMAN, in moving the adoption of the report and accounts, congratulated the meeting upon returning to a dividend of 10s. per cent., notwithstanding that the gross profit had been written off as a loss upon the coal adventure. The gross profit had been upwards of 17,000, which, after paying dividends and writing off the very considerable loss, would leave a balance of upwards of 1000, to be carried to the credit of the reserved fund. With regard to the Bon Accord property, they had been enabled to complete the contract, and the whole of the shares had been paid up, with the exception of some reserved for the manager, sub-manager, and others entitled to them, resident in the colonies. They had also the Good Hope, which was considered a valuable mineral property, and altogether different from the Bon Accord, as there was a vast quantity of copper cropping up to the surface, and visible to the naked eye, and was only awaiting favourable terms for transit, and a reduction in the price of labour, when they would avail themselves of the position of their property. The report and accounts were then unanimously adopted, and a vote of thanks to the Chairman terminated the proceedings.

MINING NOTABILIA.

EXTRACTS FROM OUR CORRESPONDENCE.

PENBERTHY CONSOLS MINING COMPANY.—These extensive mines, in the parish of St. Hilary, Cornwall, about three miles from the port of Marazion, and the wharves and foundries of Hayle, extending about two miles east to west on the course of the main lode, and about three quarters of a mile north to south, and containing at least 13 known lodes, are about to be re-worked by a powerful company. The set comprises Penberthy Crofts, Trevanion Downs, Wheal Fancy, and Enys Whal Virgin—all well known in the county for having been exceedingly productive of tin and copper. Although operations formerly were prosecuted on a large scale, they were principally confined to developing the main lode, while others have been opened on which have proved equally rich for mineral; a large quantity of valuable ore ground is yet to be laid open above the deepest level. Trevanion Downs and Enys Whal Virgin were also doing well, the former being drowned by the stoppage of Penberthy Crofts. The stoppage of the mines was principally occasioned by litigation among two of the shareholders, causing the affairs to be thrown into Chancery; since which the burrows on Penberthy Crofts, left by the former adventurers as worthless, have returned upwards of 5000, worth of tin, and are now being worked at a profit. It is believed that soon after the water shall have been forked these mines will commence paying their expenses, and reforging yield good dividends. Two pumping-engines (one 30-inch cylinder, the other about 18 inches), together with two drawing engines and a stamping mill will be erected without delay. A large interest in the new company, we believe, has been secured by some of the most experienced merchants and agents in Cornwall.

ROSEWALL HILL AND RANSOM UNITED MINES (near St. Ives, Cornwall).—It must be gratifying to those who are concerned, and very interesting to the un-concerned, to notice the extraordinary expedition, the spirit, and miner-like manner, in which this adventure has been taken in hand, and is being prosecuted, under the management of Capt. Treweek and his son, the former of whom has so successfully conducted the management of the adjoining mines, the St. Ives Consols, for the past 23 years, and was the chief promoter of the valuable and rich tin mine Wheal Margaret, which was started by him in 1842. These are only isolated instances of the successful results of his mining talent; in fact, I am informed he has sent over a ton of pounds sterling worth of mineral to the market in the past 25 years, the return of which has been paid him as co-adventurer in the shape of dividends. The Old Wheal Darlington, in Ludgvan, Boscawen Downs, in St. Just, Wheal Reth, Balmoon, Wheal Trenwith, and numberless others, have all been under his surveillance at times when they were exceedingly rich and profitable. The Rosewall Hill and Ransom United Mines now appear the next spot to which their energies are to be directed, and, judging from their knowledge of the locality, their ability as mining engineers, their knowledge of the imperfect state of the machinery in the former working, and the information gleaned by them from men now living who worked in these mines in 1808 or 18

which at present price would be 2000l., a sum amply sufficient to pay all the cost of the mine when in full working order. A question would here naturally arise, How, then, if these mines were so rich were they abandoned? This question may be answered by asking another, Why was Wheal Margaret "killed" in 1800?—Because the machinery was worn out, and the mine then considered beyond repair, money scarce, and the price of the produce not so tempting as now (then about one-half its present price) for further prosecution. It may not be out of place to notice what has already been done towards carrying out the re-working of these once rich mines. A new 40-in. cylinder pumping-engine has been ordered of Messrs. Sandys, Vivian, and Co., the greater portion of which has been delivered upon the mines, the engine-house being almost ready to receive it. A 22-in. winding-engine, and a 30-in. steam-stamp, with 32 heads, have been ordered of the same firm; these are also in the course of delivery. A house built by a former company is nearly ready to receive the stamping-engine, which will cause a great saving of cost. All the offices, engine shop, timber-house, and counting-house, are completed, and reflect great credit upon the managers for the neatness, convenience, and inexpensiveness; lastly, I might add, perhaps the best piece of workmanship of the kind that can be found in the county, is the collar of the engine-shaft, the top of which is an ellipse 11½ feet long and 5½ ft. wide, built of granite, the base thereof being 54 ft. below the surface. In conclusion, I may add it is my firm conviction another such opportunity for mining enterprise is not again likely soon to present itself, the water being comparatively nothing, ground easy, itself very rich, and metal of the best quality, being what is called refined tin.

NEW CROWN HILL.—It is stated that this mine is progressing very favourably, and the purser says they will have another East Wheal Rose. The shares, which three months ago were hardly saleable, are now at 25s. Some further particulars will appear next week.

WHEAL WHIDDON (near Aahburton).—I had occasion to walk over this ground a short time since, when I was accidentally struck with the appearance of some beautiful stores of copper and mounds in the road; in fact, on examining further I found large rocks of ore and mounds intermixed, profusely scattered about. I recollect it was worked some years since for tin, but I never heard anything of copper existing. This must have been ignorantly lost sight of. The situation is most beautiful for copper, being only ½ of a mile distant from the granite hills; and I should think any party clearing out the old workings may soon make good profits, if the lode standing in the back of the adit, which I should calculate is from 50 to 60 fms. from surface up the hill, is anything like the stuff I saw in the road. It may be worked to advantage for tin and copper. Is there no energy in the local mining men, that they neglect such a mine of promises this? No great amount of capital would be required to work it, in all probability. A great amount of work has been done, which any party taking it will be very likely to receive the benefit of.—*Vision, July 22.*

SOUTH LADY BERTHA.—Having visited this mine during the week, I was much pleased to see the splendid rocks of copper ore brought out from the adit level, now to be seen at surface; also the lode in the adit level, still holding good. From the facilities this mine has for water-power, being close to the River Tavy, it can be worked very cheap, and I have no doubt the mine will soon be in a position to pay its cost, there being ore enough at surface to pay for the already done.

BALNOON.—They have been sinking on the shoot of tin, or "carbena," formerly referred to, and find it improving very fast as they sink. They fully believe they are on the top of a very rich deposit of tin, worth now 30l. per fm.

WHEAL ADDAMS.—Having lately seen conflicting reports in your Journal of this mine (some of them very favourable), I was induced to make a general enquiry, and the following is what I have elicited from unquestionable authority, which I consider should have publicity. They have sunk a grass shaft, I think, to the 10 fm. level, and extended a level or two above this point, which, of course, is very near the surface. One level, however, is only 8 fms. from surface. In one of their ends they have a lode that would probably pay while it holds, if they had water and proper appliances for dressing; but this end is suspended, for fear, perhaps, of holing the old workings (this, however, is the report), as they have met with similar misfortunes already in several instances in the bottom of the same level. One winze was commenced sinking, but when sunk only a few feet (imagine how it must have perplexed parties to find more workers had undermined their way out the pick, and the miners made use of the words, "Ba, wea, Cap'n, we have holed to the old workings again." However, this did not stifle all hopes; at it they went again—very properly, too—at another point, valued at 50l. per fm., where they met with much better success, for they are down 5 or 6 ft., and wisely think, no doubt, they had better let well alone: sure play is the best, therefore it is suspended. Thus this winze has not proved so treacherous as the first, and is not likely to do so for a while, without it holes of itself. In conclusion, this seems general report from the miners: "They have two places at which there is a little ore (the winze and end above referred to), but they appear afraid to work them, for fear of holing to the old workings."—*Farquhar, July 23.*—P.S. The winze which Mr. Ennor thought so highly of when he inspected it has since been holed to the old workings, so I am informed.

WHEAL MARGERY.—This mine continues to open out very satisfactorily and rapidly, now that the delays and difficulties arising from the insufficient pitwork, &c. (probably by a former manager) have been overcome; and the mine is now being set and set to work. The stamps now working on the accumulated tinstuff for an improving market are not likely soon to be idle; for, besides other sources of supply, the new lode south of the 20, west of flat-roof shaft, then valued at 25l. per fm., and in whole ground to surface, has become better since account-day, and bids fair to equal in extent and depth the prolific lodes and deposits of its neighbour—the Providence Mine, notoriouly the best set in the famous tin district of Lelant. The copper lodes of Margery, too, present every prospect of increasing riches as they are developed, independently of the accumulating returns from the lodes.

SORTBRIDGE CONSOLS.—A meeting will be held on Monday, at which a dividend will be declared. A very great improvement having taken place, increased ones may be expected.

PENIDEN CONSOLS.—An improvement has taken place in the 70.

PENIDEN-ANDREA UNITED MINES.—A correspondent, upon whose judgment we place full reliance, informs us that, notwithstanding the drop in tin during April and May, these newly-opened mines rather made a profit than otherwise; that June and July will show a balance in favour of the adventurers, after credit given for the last call, which discharged every liability. The enhanced value of tin at this time, the rich lode in the 90, and improved quality of that called skimmers, are assurance sufficient to warrant the receipt of dividends at an early date. Few new mines have, in so short a time, arrived at such an enviable position. The shares are chiefly held in London, Leeds, and Devon, and we congratulate the fortunate holders.

CATHERINE AND JANE CONSOLS.—Considerable improvements have taken place in one or two points in the lead lode in this mine, of which more will be seen in the course of the coming week. The indications are such as to encourage the belief that in one of the ends they are near a very large deposit of lead. The drawing-rooms are to be enlarged, and an increased number of hands employed on the pick and tribute. An improved mode of cooking the tinstone to the railway siding is under consideration, and will greatly facilitate the returns from that part of this valuable property.

PENBERTHY CROFTS.—I read with the greatest interest, in your valuable Journal of last week, the testimony referred to by a miner, which has been hitherto so much neglected. This mine has been under my notice for many years, and after seeing the many which have been re-worked, I have been sorry that this property has not been brought before the public at an earlier period, having, as it has, the most cheering prospects; indeed, in my opinion, it will prove to be a Dolcoath in richness and durability. I hope soon to see the engine at work, the water drained, and mineral in the market, which will speak best of its wealth.—*J.S., July 22.*

TREWANE UNITED.—The operations are progressing satisfactorily, and a good pile of ore is being prepared for the market. Several lead-bearing branches have been intersected within the last fortnight, and the lode in the Marlborough adit is expected to be out very shortly. I consider the mine is looking very healthy; and, under the superintendence of Capt. William Richards, of Wheal Bassett, the best results can be expected.

ROSEWARRNE CONSOLS.—The new engine will shortly be at work, all the heavier parts being in the house. The shaft is prepared to receive the plunger-lift. The sinking will be resumed with great activity as soon as the engine goes to work. The machine, which is a very capital one, adequate to the requirements of the mine, was manufactured by Messrs. Sandys, Vivian, and Co., of Hayle.

AT SWANPOOL MINE. the prospects are daily improving, and will, ere long, take a prominent position in the Dividend List. Above 100 tons per week are being shipped to the smelting works, the cost of which does not exceed 10s. per ton, beside the rich class of ore, which is now yielding good profits.

We hear it is the intention of a party who has recently had the good fortune to bring out a sett in London, to immediately offer another, and that he has secured no less than 10 or 12 setts in the immediate locality. To him we recommend a careful perusal of an article in our last week's Journal, and to try one first; he had better wait until that be developed sufficiently, let well alone, and not take too many things in hand at once. This has perilled many an attempt, and ruined thousands.

NEW WHEAL VOR AND EAST WHEAL METAL MINING COMPANY.—We have great pleasure in directing attention to the report of the meeting of shareholders in this mine, held at the British Hotel, Charing-cross, on Monday, which will be found in another part of our Journal, from which it would appear that the district of the "Great Wheal Vor" is destined to maintain its character over all the tin-producing countries in the world.

ALFRED CONSOLS.—In cutting through the flookan in the 70 fm. level north a discovery has been made, which there is very little doubt will be the forerunner of still further developing the mine.

BAMFELDE MINES (late Poltimore).—I perceive by your Journal that this mine is likely to be soon in a position to pay dividends. It is to be hoped the directors will not make an attempt to do so until their reserves and discoveries will warrant something like a probability of keeping up their return, however low it may be, as nothing looks worse than to see a dividend followed at the subsequent meeting by a call, or extension of shares. It will be a fine thing for our neighbour at Molland, if it be as your correspondent observes, that we are to have a dividend mine in our locality. There are several other very good sets in this neighbourhood, but the failure at the Poltimore expunged all hope for our North Devon Mines. It will be curious, too, as no mine I believe has created greater difference of opinion, some judges stating it was not a copper mine at all, nothing but iron, while others as positively asserted it had been rich in copper and would be so again, if the mine be as your correspondent states, and I believe truly; it will be well to know who are correct, as some must be wrong; it will be well, also, to refer to their reports, to see if they were founded on prejudice or ignorance. If the mine does no more than pay its way, I presume the company will work it vigorously to open more levels, and then they may, if the lode holds good, look for greater results. It will also give encouragement to the shareholders, who purchased the mine for an old song, when everybody spoke ill of it; and their confidence deserved, and I hope will be rewarded by a rich mine. It is astonishing to see how a little success alters people's tones about mines. A few years ago Poltimore was laughed at when named, now it is said it may make a good mine; if your correspondent be right, it appears it will.

BENGLOF LEAD MINE.—This mine is situate about six miles eastward of Delphly, Merionethshire. It has been worked, but not in the memory of any living individual, and accounts state that large quantities of lead ore, with strong iron pyrites in thick bands in the vein, were raised. At that time, the metal was carried in bags by donkeys to Delphly, and then transported to market. A great many fms. of grey ground, between well-defined walls, having been worked away from a very

shallow level, shows plainly that the old men had strong branches of lead ore, &c.; and judging the circumstances of the place, together with the difficulty the old men had to draw their stuff and water from their shallow sinks to their day level, is sufficient to account for operations having been suspended. The mine has, however, now been put in working condition, and with the assistance of a few spirited capitalists will, no doubt, be remunerative. The 21 years' lease is at 1-15th to 1-16th dues.

CORNISH MINE PHOTOGRAPHS—No. VIII.

BY GEORGE HENWOOD.

"THE CHAPEL."

Nothing strikes strangers on their visit to the mining districts of the West of England more forcibly than the great number of dissenting chapels. In every town several are to be found of all denominations—save unitarians and Roman Catholics, few communicants of these creeds being residents. In every village and hamlet, however remote, at least one or two of the various offshoots of methodism are always to be seen; even on the highways or common downs, where the roads converge from a few scattered cottages, there, although not a house is to be seen sometimes for miles, is sure to be a chapel of some sort, however humble, frequently consisting of four mud walls and a little thatch, sometimes the rude work of the miners and labourers themselves, and are chiefly of the Methodist or Baptist denominations. A variety of causes have led to this general practice of chapel building. The increase of population that has converted hamlets into villages and villages into towns has, undoubtedly, been one cause. There can, however, be no doubt whatever a great deal has been owing to the laxity of the clergy before and at the time of Wesley's journeying in these parts, which indeed became one of the principal scenes of his labours, and where his name is still held in universal and profound respect. Even within the last 30 or 40 years the parochial duties were disgracefully conducted, or altogether omitted (now happily completely reversed), particularly in the very districts in which active ministry was most required. These were, nevertheless, far from being the whole of the reasons—these were only two amongst the rest. In very many instances the church, instead of being placed in the midst of the parish, is in some remote corner or out of the way place, as at Mylor, St. Just in Roseland, and many others. In some places the majority of the parishioners had to walk or ride four or five miles over a dreary moor or a wild common. At Brest Tor, in Devon, the church is absolutely perched on the apex of a mountain, a most picturesque but most impracticable situation, certainly. Such a journey, in so wet a climate as there prevails, often acted as a drawback to due attendance on divine service. Besides, the pews in the various churches were claimed, whether occupied or not, by the proprietors of certain estates in the parishes who paid tithes, and it is not too much to say the spiritual welfare of the mining population was entirely and grossly neglected. The agricultural labourers, on the contrary, were provided with a pew or seat by virtue of the farm tenure, and were duly expected by their employers to appear at church once every Sunday at least, if service were performed. In many parishes, in which the livings were united in two or even three, the church prayers were never read at all in some of them. Though the church itself existed as a building, there was literally no service, and no congregation as a matter of course, though there was a parson to be paid and souls to be saved. The stranger will be struck with the number and beauty of the towers and ecclesiastical structures of great antiquity to be found in these districts, showing the piety of the builders, and their evident preparation for, and anticipation of, larger congregations.

To so great a neglect had the matters arrived, that to this day there is a standing taunt in the parish of Morvah, in Penwith, where it is said a "Cow ate the bell-rope," the church having fallen into such utter decay that the tower-door was gone and the bell-rope rotten. A farmer of the parish dying, it was necessary to toll the bell at his funeral; a hay-band being substituted for the rope, a hungry cow straying about wandered into the churchyard, and discovered the dainty morsel; in enjoying the repast, she tolled the bell, to the no small dismay of the occupants of the adjacent public-house (the only residence near), who attributed the awful midnight irregular clamour to a ghost, or some unearthly visitor. The story is said to be perfectly true, and is very probable. At St. Ives the church had sunk into such disuse and neglect that the splendidly decorated stalls were actually destroyed, the beautifully carved oak roof whitewashed, and the carving obliterated! The very foundation of the fabric itself endangered by the sale of vaults and graves! whilst divine service was only occasionally performed in a population of upwards of 4000. In the parish of Stythians, near Penryn, in which hundreds of miners and granite workers resided, service was only observed once in two or three weeks, and then at such hours as were very inconvenient to persons in humble life. Even where services were regularly performed, except in large towns, the clergymen, though undoubtedly sincere, and some of the best-intentioned men, were, in many instances, ill-adapted for, and by nature physically incapable to fill so important an office as pastor of a large parish, whilst the injudicious selection of parish clerks tended, in no small degree, to render that which was already bad still worse, as instanced in the parishes of Budock and Mylor, near Falmouth, the officiating ministers in each of which were as devout, as sincere, and as zealous men as could be desired; but from defects in articulation were scarcely to be understood, except by persons accustomed to their delivery, whilst the broad Cornish sing-song nasal reading of the clerks, rendered the sublime to border on the ridiculous.

We should by no means advert to these circumstances, but to show the utter neglect into which public religious duties had fallen at a time so recent as 30 or 40 years since. The natural consequences resulted—few or none of the working population visited any kind of place of worship, but sought some retired place—even sometimes close to the village, and publicly—the men to wrestle or play at pitch and toss, and the boys to enjoy a game of marbles, or other idle pursuit, in which they were frequently joined by their elders. No idea of neatness, cleanliness, or self-respect was cherished; they were then literally "the unwashed," an amount of ignorance and superstition was prevalent which at this day is barely possible to be conceived. The clergy had not, and sought not to have, any hold on these people; they certainly were a rough, uncouth set of beings; to reason with them on the sublime precepts and gentle teachings of the gospel would have been next to useless. Whitfield, Westley, and their early zealous coadjutors, who so energetically appealed to their sympathies, and wrought on their fears in their plain but eloquent discourses, were the very messengers for these totally neglected individuals. If the populations would not come to them, they, despite every difficulty of prejudice and persecution, sought out and made their flocks, literally carrying out the command to "go into the highways to bid to the marriage feast." With the suddenness of magic the good seed took root, and has verily grown into a great tree. The number, size, and handsome character of their conventicles now bespeak a consequence and meaning far more important than are apparent to the mere casual observer. The services therein are conducted by a regular body of established preachers, and what are termed local preachers, many of whom are the captains or agents of the mines. Though some are certainly of dubious ability for such offices, yet there is a nervousness and sincerity of manner—a mode of expression—quite necessary for the work.

Their hours of worship, having earlier morning and later evening services, the much better situations and greater number of their chapels, have secured congregations far more numerous than those who attend the established church. This ancient institution must, at the present day, be most decidedly and emphatically exonerated from any charge of listlessness or want of exertion; but how very different now is the class of pastors having charge of these parishes, and how different the discipline to what they were when Wesleyanism and dissent reared their heads. The clergy are now distinguished for their attention, earnestness, and desire to cultivate the spiritual and temporal welfare of the people; most admirable instances are to be found of undoubted piety and fervent zeal. Few of the old style before described remain; these are they die off are replaced by the new and far more effective race, and the improvement is everywhere palpable.

In the present day every church and chapel has its Sunday-school—a fact that incontestably had its origin in the chapel: that this early induction to something like discipline has been of incalculable benefit to the present and rising generations is admitted and limited by all denominations.

Since we have previously introduced our friends to the society of miners in their places of business, amusements, and other scenes, let them accompany them to their village chapel on a Sunday morning, and they will see a number of neatly-clad orderly persons wending their way to the meeting-house, at the door of which, ere the arrival of the preacher, they will find a large congregation, among whom will be noticed some persons of superior appearance, usually the mine agents or respectable yeomen of the neighbourhood. Morning service is usually conducted by the local, and the evening by the district preachers, or vice versa. In either case a decorum, attention, and reverential manner is observable; the singing is of a superior character; the fine deep-toned voices of these stalwart fellows

produce an admirable effect. Hymn singing is much practised by all classes of miners, and is carefully studied. At the dismissal the people retire in good order to their respective homes. The afternoon is usually spent in reading or taking a saunter in the country. The evening is marked by crowds thronging every road and pathway leading to the meeting-house, the majority being females, whose household duties had precluded visiting the morning service. The visitor will not fail to be struck with the particularly tidy, not to say smart appearance made by persons in so humble a sphere of life, presenting, as it does, a most powerful and favourable contrast to bygone times.

In no part of the kingdom is the voluntary principle more generously supported, their means being taken into consideration. The people, out of their hardly-earned wages, contribute liberally to subscriptions of all kinds, particularly chapel extension and missionary enterprise. Formerly anded proprietors objected to have chapels erected on their estates. The benefits accruing to the localities have greatly altered their feelings in this respect; now not only is the land usually presented, or leased at a nominal rent, but the proprietor frequently adds a handsome donation.

If we contrast the ancient and modern pictures, and both are correctly drawn, neither over-coloured or exaggerated, we shall admit a vast change for the good has been achieved, and is still gradually in progress, as the records of their courts of assize fully testify, the higher class of crimes being very rare, and, when they are detected, more frequently committed by strangers than natives.

If any rivalry between different sections of religionists exist it is in good spirit: with them, however, we have nothing to do; it is only our duty to portray as we find them, and to mark the social progress. This we have endeavoured to do to the best of our ability. Where the efforts of all are equally deserving, it would be invidious to particularise, especially in matters of so sacred a character. We trust the good work will prosper, and effect the glorious ends desired, by whatever agency produced. Still we cannot but confess the counties of Devon and Cornwall, the mining population most especially, owe much of their moral improvement, their domestic comfort, and their present condition in the scale of society and happiness to the "Chapel."

CHEMICAL GLEANINGS—No. II.

BY RICHARD V. TUSON, F.C.S., F.S.A.

ANTIMONIAL CINNABAR.—Professor Böttger prepares this substance by slowly heating and constantly stirring a mixture, composed of 1 part by weight of chloride of antimony (sp. gr. 1.36), and 1½ part by weight of hyposulphite of soda, dissolved in 3 parts of water. The stirring is continued until nothing more evaporates from the liquid. By acting in this way a beautiful crimson-coloured compound of sulphur and antimony is obtained, which readily dissolves in hot solutions of the caustic alkalis, forming a liquid, which may be advantageously employed in certain cases to blacken objects made of polished copper.

PREPARATION OF SULPHURIC ACID FROM GYPSUM.—Herr Köhnel proposes to prepare sulphuric acid by first converting gypsum into sulphide of calcium, by heating it with carbon. The sulphide of calcium thus produced is mixed with water, kept at a moderately elevated temperature, and decomposed by carbonic acid. The sulphuretted hydrogen disengaged under these circumstances is burnt, and the sulphurous acid produced by its combustion is conducted into leaden chambers, and converted into sulphuric acid in the ordinary way by the vapours of nitric acid. The carbonic acid generated during the heating of the gypsum with the carbon in the first process is used to decompose the sulphide of calcium; and the waste heat is employed to maintain the requisite temperature for the carbonic acid to act upon the sulphide of calcium.

POTASSIUM AND SODIUM.—Prof. Wagner suggests that an attempt might be made to obtain an alloy of potassium and sodium, by heating together a mixture of the carbonates of potash and soda, chalk, and charcoal powder, according to Deville's process, and to employ it in the preparation of aluminium, calcium, magnesium, &c. The advantages of this process, according to the author, appear to be that, in consequence of the lower fusing and boiling point of the alloy than either potassium or sodium alone, it may be more easily and cheaply prepared than either of them separately.

We are glad to find that our excellent correspondent, Mr. R. V. Tuson, is a candidate for the chair of chemistry in the Medical College of St. Bartholomew's Hospital; and that, from the nature of the many testimonials in proof of his qualifications for the office, he can be little doubt of his obtaining the appointment. Dr. Stenhouse, F.R.S., through whose resignation the professorship has become vacant, very warmly recommends Mr. Tuson, not only as having been his principal assistant in the laboratory for nearly four years, but as having conducted the practical class, and occasionally lectured for him, to the entire satisfaction of all. Even a more gratifying testimonial than that of Dr. Stenhouse, is one signed by "The Students of St. Bartholomew's Hospital," wishing that a teacher, endowed with such powers of imparting the principles of chemistry, might continue amongst them in an office for which he is so admirably adapted. Drs. Ronalds and McCoy, of the Queen's College, Galway; F. A. Abel, director of the Chemical Establishment of the War Department; Dugald Campbell, analytical chemist to the Bromley Hospital; C. L. Bloxom, professor of practical chemistry, King's College; and G. Phillips, director of the Chemical Laboratory of the Inland Revenue, also warmly espouse the cause of Mr. Tuson, as being admirably adapted for the position.

MARINE PROPULSION.—The Commissioners of Patents have just issued the first part of their abridgements, relating to Marine Propulsion. Although at a much earlier period inventions for propelling boats without oars or sails were described by various writers, the first patent on record appears to be that of David Ramsey and Thomas Wildgoose, granted in 1613; but of this, and several other of the early patents, no specifications appear to have been enrolled, as the patents simply refer to what it was proposed to effect, and not to the mode of effecting it. In 1693 an Act of Parliament was passed, granting to the Marquis of Worcester and his successors the whole of the profits which might be derived from an invention which, it appears, consisted in causing the stream to act upon paddle-wheels, and thus to wind a rope on to an axle, drawing a boat towards a fixed anchor at the other end of the rope. In 1681, R. Hooke described windmills in which, according to Bourne, we have all the main features both of the screw propeller and feathering paddle wheel. In Oct., 1788, a double pleasure boat, invented by Patrick Miller, of Dalawinton, was propelled by a steam-engine turning two paddle-wheels, one before the other, in the space between the hulls. The steam-engine was of about one horse power, with two upright cylinders, 4 in. in diameter, the valves being opened and closed by hand gear. Previous to this project a few unsuccessful attempts had been made to propel vessels by steam-power, commencing with an experiment in the year 1543, but from this being the first of practical utility, it has been, not inappropriately, called the parent engine of steam navigation. No other important advance seems to have been made for some considerable time afterwards, but in May, 1815, Dr. Dodd went from Glasgow to London in the *Thames*, which was built on the Clyde. This vessel was of 70 tons register, 79 ft. long, and 16 ft. beam, with engines of 14 horse power, consuming 1 ton of coal per 100 miles. It carried 15 tons of coal, the paddle-wheels were 9 ft. in diameter, and 758 miles were accomplished in 12½ hours. From this time the improvements in steam navigation have been gradual, and the result has been the production of our present very beautiful system of marine locomotion. The work containing the abridgements of the patents relating to this class of inventions has been very carefully compiled, and will prove of much value to those interested in scientific literature, but would have been more useful to future patentees had it comprised a reference to similar inventions which had been previously patented; as, although, no doubt, the whole of the inventions are comprised, the intending patentee is far more likely to repeat an old invention than he would have been were the abridgements in this case arranged in a similar manner to those relating to iron and steel—he has now only the index to assist him.

AMERICAN PATENT LAW—BESSEMER'S PROCESS.—We some time since alluded to Mr. Kelly's claim to priority in the United States, in opposition to Mr. Bessemer; and although Mr. Bessemer was proved the first patentee, it appears that, according to the laws of the United States, patents can only be granted to the original inventor, and as Mr. Kelly has established his case, the right of other patentees is now lost. The acting commissioner of the American Patent Office reports that in the matter of interference between the patent of Henry Bessemer, of London, and the application of Wm. Kelly, of Lyon County, Kentucky, for improvements in the manufacture of iron and steel, it appears that, by the concurrent testimony of numerous witnesses, Kelly made this invention, and showed it by drawings and experiments as early as 1847—the English patent of Bessemer being dated Oct. 11, 1855. Priority of invention in this case is awarded to the said Kelly, and it is ordered that a patent be issued accordingly, unless an appeal be taken within 60 days from this date (April 12, 1857). In this instance Mr. Bessemer has certainly been unfortunate, and we cannot see how such a dangerous law can be maintained in a country where progress is so much talked about. The justice of the system appears to be doubted even on the other side of the Atlantic, the *Scientific American* remarking—"Our patent law, we believe, ought to be reformed in that particular feature by which Mr. Bessemer's patent has been superseded. A certain fixed time should be allowed for an inventor to apply for a patent for his invention, and if he does not do so within that period, if his invention has been publicly used by himself, it should become public property, otherwise he should not be allowed to subvert a patent granted to another who has taken proper means to put the public in possession of the invention."

Mr. R. Tredinnick, of Gresham House, Old Broad-street, supplies us with the following information as regards the London Share Market:—The tone of the Mining Share Market is both healthy and buoyant; the average dividends for the past six months exceed 16 per cent., whilst the yield of copper for the year ending June 30 is not only satisfactory but highly progressive. The price of tin is also more remunerative. The returns of the following mines for the year ending June 30 have increased, as specified, over those of 1856:—

Alfred Consols	£34,802 against £27,811	Great Eastern	£15,917 against £10,330
Clifford	28,613 against 16,052	Gr. South Tolgus	18,781 against 4,044
Collacombe	12,430 against 4,877	Kelly Bray	6,318 against 5,458
Dopper Hill	5,294 against 2,918	Margery	5,182 against 2,987
Dryden Great Cons.	147,623 against 140,000	West Africa Cons.	8,416 against 2,880
Gramp. & St. Aub.	6,678 against 2,548	West Soton	30,963 against 27,187

On the contrary—Bisset shows only 53,350l. against 66,999l.; Buller 31,960l. against 53,027l.; Carr Brea 21,227l. against 31,178l.; and Consols 9553l. against 10,651l.

Mining Correspondence.

BRITISH MINES.

ABBEY CONSOLS.—E. Williams, July 21: We are driving the eastern level out of the lode, and the men are going on fast with driving the same; they are leaving good ore to stand to the south of their level, and I put men on this day week to strip down the lode after them, which is yielding good ore stuff, especially at the bottom. The stope in the rise and west of ditto are looking quite as well as when last reported on. The western level is in a very good bunch of ore, and is still worth 12 cwt. of ore per fathom. I have suspended the clearing of the old workings until I can have better advantages for doing the same. We are going on as fast as we can with our dressing operations.

ALFRED CONSOLS.—M. White, T. Trelease, T. Hosking, July 20: The lode in the 150, east of this shaft, is from 3 to 4 ft. wide, unproductive. The 140 cross-cut is progressing favourably. No change in the 120, west of this shaft, neither in the 70 cross-cut north. The north lode in the 120, east of Davey engine-shaft, is worth for copper ore 200, per fm.; none of the south part of the lode broken since last report in this level. The north lode in the 100, east of this shaft, is worth for copper ore from 90 to 100, per fm. This lode in No. 1 mine, sinking below this level, is worth for copper ore 100, per fm., and in No. 2 mine it is worth quite 120, per fm. The south lode in this level, east of the shaft, is worth for copper ore 60, per fathom. This lode in the 90 east is at present small and unproductive. The north lode in No. 2 mine, sinking under the 90, east of this shaft, is worth for copper ore 70, per fm. In driving the 50 south we have intersected a branch of copper ore 3 in. wide, worth 30, per fm. No change to notice in any other part of the mine since last report.

BALNOON CONSOLS.—W. Hollow, July 21: Since my last report we have sunk the Woolf shaft 2 ft., and the change still continues very favourable. In the 10, south east from the flat-roof shaft, the lode has made a downward dip; we are now sinking on it, it is about 2½ ft. wide, and producing very rich stones of tin, worth at least from 10 to 12½, per fm., and has a very promising appearance.

BALLYVIRGIN.—R. W. Smith, July 21: No. 1 stope, in the back of the north level, following on the north end, will yield 3 tons of copper ore per fm., lead not sufficient to value. In No. 2, the underhand stope, over the back of the north level, and south of No. 1 stope, the tin will yield 2½ tons of lead, and 10 cwt. of lead ore per fm. The tin mine is exceedingly poor. The crusher was working yesterday afternoon, and crushed about 6 tons of stuff. All the poor stuff near the shaft in the 10 is drawn to surface, and to-day we commenced drawing the ore stuff that was broken in the north stope. The shaftmen are at work taking away the ground that formed the dam in the 10. We have received the bottom lift from Tavitock.

BARF LEAD MINE (Kewick).—J. Irwin, July 22: The men in the rise are working well, and expect a great improvement shortly, the lode being more vertical, and producing fine slabs of solid ore. No. 2, on the parallel vein, continues a regular underlay of 2 ft. in a fathom; the chance of a good bunch of lead is great. The stope is re-cut to four men, at 150, for the month, the lode yielding gossan, carbonate of lead, and blue ore; of the latter, ½ ton per fm. We are dressing a nice pile of the best ore, which is worth about 150, per ton; the coarse ore we are putting to pile. Our dressing-floors and hutchies are now complete, and we have every confidence of the mine yielding large quantities of lead.

BEDFORD CONSOLS.—J. Hodge, July 23: The lode at the air-shaft is fully 5 ft. wide, composed of a very strong gossan, quartz, and capels, thickly spotted with black ore; on the whole, a very kindly lode, and promises a further improvement. The lode in the rise is of the same character as stated in my last, ore, but not enough to value; the ground is very similar to that before stated.

BEDFORD UNITED.—J. Phillips, July 23: There is no alteration in the 145 fath. level. The lode in the 150 east is 2 ft. wide, composed chiefly of muddle and spar, with spots of ore in it. We are sinking a winze in the bottom of this level, but as yet the lode has not been taken down. The stope in the back of the 115 east will turn out from 4 to 6 tons of ore per fm. Paul's stope in the bottom are worth from 3 to 4 tons of ore per fm. We are driving by the side of the lode in the 115 fath. level west. Warner's stope in the back of this level continues to yield 5 tons of good quality ore per fm. We have a good improvement in the 103 west, the lode being now from 3 to 3½ ft. wide, and will turn out fully 4 tons of good quality ore per fm.; this improvement will be a great help to us in keeping up our samplings. Jackson's stope in this level east are worth 2½ tons of ore per fm. No alteration in any other part of the mine.

BODCOLL.—F. Evans, July 18: The lode in the 10 fathom level west is much the same as when I last wrote; it has a very good appearance, composed of sugar-par, and mixed throughout with spots of lead, copper, blende, and sulphur. I am firmly persuaded that this lode will turn out lead if tried a little deeper—driven last week, 3 ft.: total muck, 21 tons, 5 ft.

BOG MINE.—W. Barratt, July 20: We are progressing favourably with sinking the winze, and think from present appearance, we shall not be many days before we shall have the lode to the Boat level. This has been a troublesome job to encounter with, but hope we have nearly overcome it, when we expect to be in a position to set on some tributaries in getting lead ore and jack, that will be got at a profit. We have had an interview with the party at Raheen respecting the jack; they pronounce it to be good, particularly what can be got from underground, judging from what we sent from the Burrows, and they are anxious to have all we can get when we let off the water; we are informed that great quantities can be got as soon as we get to the Boat level, and as clear it out. We have had some trials at surface on the back of the south lode; it is of a promising character, and interspersed with lead ore.

BOILING WELL.—J. Delbridge, July 18: In the 60, on the north lode, the lode is 18 in. wide, yielding some good stones of copper ore—at present in tribute ground. In the 50, on the south part of the lode, the lode is unproductive. In the 50 east the lode is small and unproductive. In the 40 east the lode is 13 in. wide, tribute ground, composed of lead, blende, and copper ore. In the 30, east of Austin's lode, the lode is 2½ ft. wide, yielding 2 tons of blende, 5 cwt. of lead, and stones of copper ore. In the 20, west of Austin's lode, the lode is 1 foot wide, yielding 5 cwt. of lead, 1 ton of blende, and copper ore. In the 20, east of ditto, the lode is yielding stones of lead—not to value. In the 10, east of Syrett's shaft, the lode is 1 ft. wide, yielding some rich copper ore, and some good stones of lead. In the 10, east of the lode, the lode is 20 in. wide, yielding some lead, copper, and blende. Being on 14 fms. below the surface, we cannot expect much ore; depth is required. In the 30 west of the lode, the lode is 30 in. wide, yielding stones of ore; tribute ground. In the 10 cross-cut, at King's, no lode as yet. In sinking Austin's shaft below the 30 the ground is favourable. At Syrett's shaft, below the 10, the men are working with spirit, and the ground is good for sinking. In the stope in the 20, to Austin's and the 30, the lode is yielding a fair quantity of blende and lead ore. Other parts of the mine are much as usual.

BWLCH CONSOLS.—R. Northey, July 15: I am glad to inform you that the lode in the 75 fathom shaft is very much improved, producing very good stones of lead ore, than last reported. The lode in the 50, driving west, is small and poor at present. The lode in the end east is not looking quite so well. I sampled yesterday 15 tons; I should have sampled 20 tons, but the water is very scarce for crushing.

CARADON CONSOLS.—W. Rich, July 22: There is no material alteration in the 35 cross-cut north; the ground continues very stiff for driving, but we are forcing on the end with six men, as fast as possible. At present we cannot drive more than 3 ft. per week, but we think the lode cannot be very far ahead, and as we continue to near it we expect the ground will become somewhat easier. At the boundary shaft, we have fixed pitwork, cased and divided the shaft, and shall forthwith commence to cut a flat near the present bottom, and which may probably take some three weeks before we shall be in a position to resume the sinking of the shaft.

CLARA SILVER-LEAD.—S. Trevelyan, jun., July 22: We have received the machinery from the Aberystwyth Foundry, and have got the wheel to draw from the north within the next fortnight, this day we began.

COLLACOMBE.—S. Mitchell, July 21: During the last week the rise in the back of the 75 west was a little better, driving of this level will be resumed in a few days. The 63, east of Morris's shaft, has been driven 6 ft., and the lode worth 1½ tons of good ore per fm. The 40, west of the western shaft, has been driven 2 ft., and the lode worth 1 ton of ore per fm. Other underground operations progress well. We hope to sample about 100 tons of good quality ore for the present month.

COLLEGE MINES (Limited).—A. Braithwaite, R. Tucker, July 18: We are in the same position at the mine as last reported; the water is rising 2½ fms. of the surface, the only work going on of any consequence at the mine is the dressing of ore, 11, per ton; by the end of next week we shall finish the ore, we shall then dress the same, and clean all up; there will be, when all is completed, 14 or 14½ tons. We forwarded to the secretary the letter brought by Capt. Tucker from the Irish Mining Company, offering 160, 100, per ton, delivered at Kingstown. During the time the captain was in Dublin we added more to the bulk from which the sample was taken; we have, therefore, mixed together the whole, and have sent by last night's mail another sample, at the same time informing the secretary that we have 10 tons ready for delivery. We have cleared up two of the old shafts at Clay. We have to spill through some falls of ground from the back of the level, with the view of getting to the fore-brest, where the two lodes come together, and where, we are informed, we shall meet with some good ore in the end.

CWM SEBON.—J. Boundy, July 18: Since my last the ground in the engine-shaft is becoming harder, the lode a little larger, yielding about 7 cwt. of ore per fm. In the 60, driving north west, the lode is about 3 ft. wide, yielding about 5 cwt. of ore per fm., and has a very favourable appearance; we cannot do anything more in this end at present, in consequence of a pile of stuff behind the end, and our short supply of water will not allow us at present to take it away. I have put the men that were in the end to raise some ore in the quarry for the new crusher-house. The men driving the cross-cut in the 30 have not yet cut the new crusher-house. The men driving above. The stope throughout the mine are looking much as usual. With regard to the tribute department, the pitches are, on the whole, proving equal to expectations. I have commenced fixing pulley-stalls, to let the winch-kibble down in the western shaft, to haul up some ore-stuff in the 8, belonging to a pair of tributaries. I want to get the kibble down as far as the 40, as there is some ore ground there that will do to take away on tribute; at present we cannot do anything about the 40 west, because we are not in a position to take stuff. All other operations are going on satisfactorily.

DEVON AND CORNWALL UNITED.—T. Neill, July 21: Midway Level: We have driven 9 fms. through a lode of ore, but at present the end is not looking so well, worth about 3 tons of ore per fm., but we may expect an improvement again, as we get near the rise in the back of Bastard's level. The stope in the back of this level is worth 6 tons of ore per fm.—Bastard's Level: The stope west of rise is worth 8 tons of ore per fm. No other change in any part of the mine since last week's report.

DEVON AND COURTNEY.—T. Bawden, July 22: The lode in the pitch in back of the 90 is worth 100, per fm. The lode in the pitch in bottom of the 80 is worth 100, per fm. The lode in the stope in the bottom of the 80 is worth 150, per fm. Our diagonal shaft is down 9 fms. below the 90.

DEVON BURRA BURRA.—In consequence of the men being engaged in fixing the plunger, there has been no alteration to report during the present week.

DEVON BULLER.—W. Neill, July 23: The sinking the engine-shaft below the 44 is progressing satisfactorily. The lode in the 44 end, driving west, is from 3 to 4 ft. wide, and much of the same character as last reported on. The lode in the 22 end, driving west, is yielding 3 tons of good ore per fm.; the lode in the rise in the back of this level is small, and yielding a little ore; in the same level, driving east, we have intersected a small cross-course, and we have not discovered the lode on the east side as yet. The lode in the 20, driving west of the western shaft, is at present poor, but we have every prospect of its becoming a good lode of ore, having driven through several fathoms of good ore ground in the level below, and also in the pitch, is now working 6 fms. below the surface; the lode is from 2 to 3 ft.

wide, containing gossan and ore, and yielding full 2 tons of good ore per fm.; both of these points are several fathoms west of the 20, and I have no doubt it will prove a continuation of one shoot of ore. The grinder is nearly completed, and we are now making an incline for a tramroad from the floors to the grinder-house, which will be a great saving in the dressing for the future.

DOLWEN.—F. Evans, July 18: The lode in the adit level west is not quite so hard as it was last week; it is principally composed of nice spar—driven last week 4 ft.: total now driven, 54 fms. 0 ft. 2 in. The shaft has been sunk this week 2 ft. 6 in.; the ground is a little easier, and the lode is still large and promising.

EAGLEBROOK.—H. Tyack, July 18: In the adit level, we continue driving west behind the engine-shaft; the part of the lode which we are driving on is about 3 ft. wide, composed of gossan, clay-slate, and rich stones of lead ore, producing about 12 cwt. of the latter per fm. In the stope in back of this level, above 40 fms. east of the engine-shaft, the lode is about 5 ft. wide, yielding about 35 cwt. of rich lead ore per fm. In driving the 5 west towards the engine-shaft, on the north branch, the lode is about 4 ft. wide, and contains good stones of lead ore; this part of the lode is nearly of the same description as that in the adit going behind the engine-shaft. In No. 1 cross-cut, in the 10, we are now driving east of the cross-cut towards the engine-shaft, on the north part of the lode, which is composed of gossan, soft spar, and clay-slate, with a good mixture of lead ore—about 18 in. wide; the level is now extended east of the cross-cut about 6 ft. No. 2 cross-cut we continue driving west; the lode in this level is now about 4 ft. wide, producing rich stones of lead and copper. The pumps are put down in the upper shaft, and we have fixed the bobs and all the pulley-stands, and we hope to get to the shaft next week, when the men will resume sinking. I am sorry to inform you that we have been unable to crush any lead for the past week, in consequence of the dry weather. We have about 5 tons of lead in the ore-house clean; this is chiefly from the stimes. We have now a large pile of ore ready supplied for the crushing-mill.

EAST CARN BREA.—T. Glanville, July 23: On Saturday last we set the engine-shaft to sink under the 10 by six men, at 35, per fm.; the lode is 3 ft. wide, composed of gossan mixed with tin. The adit level to drive west by four men, at 50, per fm.; lode 1 ft. wide, yielding good stones of yellow copper ore.

EAST POWY CONSOLS.—The ground in the cross-cut in the 30 is easier than when last reported.

EAST PRONGOCH.—T. Pascoe, July 21: The engine-shaft sinking under the 30 has been deepened 5 ft. since setting-day. I regret to say we have not had sufficient water for the wheel for the past three days, but the weather has changed, and we are again progressing favourably with the forking; I hope to have the water again in fork before the end of the present week. The men are at present in the 20 cross-cut north; there is a slight change in the ground in this level, and a little water coming from the end, which is not at all a bad sign.

EAST PROVIDENCE.—W. Hollow, T. Uren, July 20: The eastern adit driving west by four men, at 50, per fm.; the lode here is 18 in. wide, producing a little tin, and is of a very promising appearance; the lode is strongly mineralised, and at a depth we think it will yield quantities of tin. Wheel Smith adit is driving south by four men, at 60, per fm.; we expect to cut the new lode shortly, then we shall be able to ascertain the most eligible spot for an engine. A cross-cut north from this adit is driving by two men, at 80, per fm.; in it we expect to cut the Providence north lode by four men, at 50, per fm.; the lode here is 8 in. wide, yielding tin of low quality. These mines need no comment, the locality in which they are situated and their prospects being first-rate, requiring only a little time to open.

EAST ROSEWARNE.—W. C. Vivian, July 21: We are sinking the engine-shaft below the 22 fathom level on a very fine looking lode, producing occasional stones of yellow copper ore. The 22 west is producing stones of copper; the 23 east is unproductive. On the north lode, the rise in the back of the 13 contains a rich branch of copper ore, and is opening tribute ground of moderate quality. The 6 fms. level east is opening moderate good tribute ground. No lode has yet been met with in the cross-cut. The stope in the back of the 23 fms. level west are turning out well.

EAST WHEAL FALMOUTH.—W. Burrows, July 22: In the 20, north of engine-shaft, the lode in the end is producing good stones of lead and jack ore, with a very promising appearance. The stope in back of this level are worth 10 cwt. of lead ore per fm. The lode in the end is producing good stones of lead and jack ore. We are progressing satisfactorily in sinking the engine-shaft, which is now down nearly 3 fms. below the 20. In the 10 we are daily expecting to cut the east lode. The stope south of Morcom's winze are without any alteration.

EAST WHEAL ROBERT.—E. Collom, July 22: There is nothing new to communicate. The lode has lately increased a little in size, and still contains pretty much muddle, and ore in small quantities.

EAST WHEAL RUSSELL.—J. Goldsworthy, July 23: We are busily engaged in taking down the lode in the 60 east end; the lode is about 5 ft. wide, and looks more promising than when last taken down, more particularly in the present end, where it is producing more ore. We have done but little in the western end, owing to the air being so bad. We have not taken down the lode in the winze in bottom of the 55; this winze is sunk about 7 fms. below the level. The stope in back of the 55 is not so good as when last reported. We have about 5 fms. more to clear the north adit to the present end. We are getting on with the dressing as well as can be expected.

ESGAR MWN.—W. Kitto, July 18: In the 40 cross-cut north, driving west of engine-shaft, the ground is very much mixed with carbonaceous lime and muddle, which we consider a good indication. The stope in the back of the 55 is worth 10 cwt. of ore per fathom. The stope in the back of the 55 east is producing about 5 cwt. of ore per fathom. The 75, east of engine-shaft, is looking pretty well, at present producing 8 cwt. of ore per fathom. There appears to be a change, both in ground and lode, to what was in the level above. The western end in this level produces a little ore, and the lode looks very healthy.

ESGAR DDU.—W. Kitto, July 18: We are still sinking a shaft in the bog; the lode here is very strong, and of a beautiful character, having a most splendid gossan, nature of the lode, and ore is shallow, think there can be no doubt of having rich deposits of ore in depth. The water here is black.

FRANK MILLS.—J. P. Nicholls, July 22: The pit in the 54 will be completed by the end of this week. We hope to commence the cross-cut in the early part of next week. The west lode, in the 73 end, appears to be getting more settled, and is now looking kinder than it has for some time past. The 72 end north, on west lode is at present poor, and the ground harder than usual. The 60 and 73 ends south, on east lode, are producing from 4 to 5 cwt. of lead each per fm. Cole's stope in back of the 72, on east lode, has improved, and is now producing 10 cwt. of lead per fm. Yeates's stope in back of the 72 south, on east lode, is worth 5 cwt. of lead per fm. All other parts of the mine are without any material alteration since last reported on.

GAWTON COPPER.—J. Gill, July 21: The engine-shaft is sunk to the 50 fathom level, and have set the shaftmen to cut into the lode, at 90, per fm.; the lode as far as we have seen contains a great deal of muddle, and occasional stones of ore; I cannot state its size, we have not as yet reached the north wall. The men in the 35 cross-cut are sinking the lode, and we never had such favourable indications of getting near the lode as at the present time; from the great increase of water, and according to the calculation of the underlie and distance driven, I think we shall shortly intersect it. The lode in the 36 west is 4 ft. wide, and will yield about the usual quantity of ore (1½ ton) per fm.—a very promising lode. In the stope below the 24 I see no change of importance, the lode being still worth from 30 to 35, per fm. All our surface operations are going on satisfactorily.

GREAT CARADON.—J. T. Penpraze, July 22: No lode is of the same character as last reported, still containing superior gossan, soft spar, and spots of rich copper ore. On No. 2 lode, we are down to water in the trial-shaft; this lode is looking exceedingly well, and is full of pease, soft spar, muddle, and rich copper ore. The men are now engaged in filling containing pits and removing rubbish, which I hope will be finished in a day or two. I should recommend you, as soon as possible, to commence sinking an engine-shaft, and to erect such machinery as may be required.

GREAT CRINIS.—S. S. Rice, July 20: The summer has been engaged in lengthening the stope westward. The ground is proving harder for working than we thought it would have been; however, after the stope is worked to the west, the ground worked last month, the men will be able to break a larger quantity of ore than they are now enabled to do. With respect to the value, there is no material change to notice. At Daniel's shaft, there are two pitches set in the back of the 30, east of the shaft, at 12s. in 11. In the back of the 10, east of the rise, there is a pitch working at 5s., and west of the rise one at 10s. in 11.

GREAT ONSLow CONSOLS.—G. Rickard, July 22: No important change has taken place in the engine-shaft since last report. The lode in the bottom end is of good quality, and with an increased quantity of water. I think there is a slight improvement in its appearance, although the quantity of ore produced has not much increased during the past week.

GREAT SHEBA CONSOLS.—J. Spargo, July 23: There is no material change in the tribute pitches since my last; the men are still at the engine, and the ore coming to surface appears to be of better quality.—Kelly Hill: The ground in the shaft still continues favourable for sinking; we now and then cut into the lode, and the ore we have taken out at different times produces 10½ per cent. I am looking forward when we reach the 20 to be in possession of a rich course of ore; such a lode as this is rarely to be met with at such a shallow depth.

GREAT SOUTH TOLGUS.—J. Daw, July 22: No lode has been taken down in the 80, west of new shaft, in the past week. In the 70 the lode is a foot wide, producing a little ore, and looking more promising. In the winze sinking below this level the lode is 1½ ft. wide, producing 2 tons per fm. In the 60, on the north part, the lode is 1½ ft. wide, producing 2 tons per fm. The south part is 1 ft. wide, producing 2 tons per fm. This level is suspended, and the men are put to rise so as to get throughout the mine. In the rise in the back of the 60 the lode is 3 ft. wide, producing 6 tons per fm. In the 50 the lode is 2 ft. wide, producing 3½ tons per fm. In the 40 the lode is 2 ft. wide, producing a little ore. In the 30 the lode is 1 ft. wide, producing 2 tons per fm. The pitches are looking well, and the tributaries have got good wages.

GREAT WELSH.—Capt. Kernick: Finding great need of a communication from the rise to the sink to ventilate the 20 shaft, we arranged on Saturday for the men in the 20 shaft to assist in this work, and commenced on Monday, at 1 a.m., and toiled the ground all right last night, and have now good air in each level. You will perceive this rising and sinking has been effected in a short time and at a small cost, and I am glad to say it has opened a good piece of ore ground.

GREAT WEST PORTIDGE.—J. Richards, July 23: There is nothing new to advise you of since my last week's report.

GREAT WHEAL ALFRED.—M. W. Mitchell, W. Bagshole, July 18: The lode in the 180 fms. level, west of Copper-house shaft, is 3½ ft. wide, producing good stones of yellow ore, mixed with beautiful soft blue-spar, evidently nearing the run of ore seen in the 170 fms. level. In the rise back of this level we have cut into the lode 3½ ft., and no south wall, which is worth 400, per fm. In the cross-cut at this level, immediately under the 160 end east, on the south part, we have intersected a lode about 1½ ft. wide, yielding 1½ ton of copper ore per fm. We expect to cut the south part in about 5 fms. The lode in the 160 east, on the south part, is worth 350, per fm. We purpose sending you a few specimens of ore from the rise back of the 170 on Monday next. Our skip-road will be complete to the 160 in a few days, when we shall resume the 160 fms. level west.

GREAT WHEAL BADDEN.—J. Jenkins, July 21: In the 66 fms. level east the lode is 2 ft. wide, producing 4½ tons of lead ore per fm. In the stope west of the sink, below the 61, the lode is 1 ft. wide, about 8 ft. above the level of lead ore per fm. The 61 end is still in hard kilns; the lode is 18 in. wide, producing a little lead. In the winze sinking below the 51 the lode is 18 in. wide, yielding about 1 ton per fathom—ground harder for sinking. All other operations throughout the mine are much the same as when last reported.

GREAT WHEAL BUSY UNITED.—J. B. Pascoe, July 18: The water is down 4 fms. 1 ft. below the 63 at Harvey's engine-shaft; we shall have the 70 dry in another week; the 70 is dry at King's, to the east of the shaft; we hope to have the level dry at the shaft by Monday. The last of levels from the engine-shaft west will account for the levels being dry there first. The course of tin, referred to in our report, at King's shaft is now dry; the workings are 7 ft. wide, good work for the width of the lode is unknown, and I believe is whole to the adit. The levels are driven by the side of the lodes throughout the mine—a bad practice. We have used and secured the shaft down nearly to the water, and we shall be enabled to draw from the 70 by the end of next week. There is a cross-course going through the lode where the tin is joined—a good symptom, and a canner lode intersects the main lode a little further west, so we shall have a large run of good ore nearer the water level. We are progressing with the stamp-dress, burning-house, and at surface as fast as possible, and shall begin putting up new winding-engine at King's on Monday. We have several other discoveries in other parts of the mine in the past week. Our prospects are fast improving.

GREAT WHEAL VOR.—M. W. Martyn: Crease's shaftmen have been cutting ground for the railroad and carriage, to carry the main rod at the angle below the 194, fixing the same, and making the new connection complete, and preparing to send away the drop-lift. By stopping Crease's engine to make the new connection, and having the necessary work to send away the drop-lift, the water has risen in the 214, but will soon be drained again to the bottom of the pump-pipe in this shaft, 237 fms. Trevalyn's shaftmen have been casing and dividing shafts from the 194 to the 202, and fixing pulley solar at 204.—Main Level: The men belonging to Boucher's shaft continue to cut ground and fix timber below the 204, removing stuff from the 174, and enlarging the bob-pit at Crease's shaft.—Treman's Lode: The 40, south-east of Sand Bank shaft, is driven 6 ft., and now passing through a part of the lode, yielding good stamping work for tin; when the south wall is reached its value will be reported.—Wheal Hotel Engine-shaft: In consequence of the breakage of the main case-bob at Boucher's shaft, nothing has been done in the 100 east and west during the week. We have sent to smelting-houses to dry about 60 tons of tin ore. We continue to push the work in Crease's and Trevalyn's shafts (necessary for the drainage), and in Boucher's shaft for the continuing of the skip, to keep pace with the richer tin ground, now being drained, and we are glad to say that the quantity of tin will increase from this portion of the property, in proportion to the number of men employed.—(Hence the above report has been received, advice have arrived that they expect to drop the lift in Crease's shaft in a few days.)

GWYDYR PARK CONSOLS.—H. Hawson, July 23: During the past week, in driving the Cross Mawr adit, the ground is not so easy for driving as it has been, but still carries some strings of lead; and also in driving south upon the Vynhallas the lode still continues to improve both in size and quality. At the higher mine, the forebrest of the level has more water, but the ground is hard.

HAWKMOOR.—J. Richards, July 20: The lode in the engine-shaft sinking below the 50 is without alteration this last week. In the 50 west we have made little progress in cutting through the cross-course, which is very large and wet. In the adit west the lode is 2 ft. wide, producing good stones of ore. Our tribute pitches are looking well, and relieving in place.

HEWARD UNITED.—J. B. Lightoller, July 23: Since last report the ground in Wepre shaft has been much easier for sinking, from having met with a vein of a promising nature, and containing nice stones of ore. We have not made any trial on it yet, nor shall we do so until the shaft is communicated with the rise over the 50, which will be accomplished about a week from this, when we hope this part will begin to assist as in our returns. Batters's shaft steadily progresses, and is now down 32 fms. from surface, leaving about 4 fms. of ground to sink through to the rise over the adit level.

HINGTON DOWN CONSOLS.—W. Richards, July 22: In the 100 fathom level, west of Morris's shaft, the lode is large and promising, carrying a good deal of value; the 100, east of shaft, is unproductive. In the 100, west of Doidge's winze, the lode is at present poor; the lode in the 100, east of Doidge's, is large and kindly, with some good stones of ore. In the 85 east the lode is large, interspersed with one large lode, and large and rich, but not rich. The lode in the 55 east contains a little more ore than when last reported on. In the 35 east, on the north lode, the lode is worth from 1 to 2 tons of good ore per fm.; the 25 west, on the south lode, is without change. The 75 cross-cut south progresses as fast as the nature of the ground will admit. The same remark will apply to the sinking of Thomas's shaft.

HOLMBUSH.—The lode in the 145 west will produce over 1 ton of ore per fm., worth 90, per fm. In the 145 south, on the lead lode, the lode is letting out much water; it will be cut into in a few days. The lode in the winze in the bottom of the 145, east of Diagonal, is improved, and will produce over 1 ton of ore per fm., worth 90, per fm. The stope in the bottom of this level will yield 5 tons of ore per fm., worth 100, per fm. In the 160 west the lode is producing ½ ton of ore per fm., of inferior quality. In the 165, on the flapjack, the men will most probably intersect the lode by the end of the month. The lode in the 124, west of Walle's, is much the same as last reported.

HUCKWORTHY BRIDGE.—J. Kay, July 23: The end is progressing very satisfactorily and encouraging. The lode is large, carrying a regular prawn, with a leading branch of spar and rich copper ore. The remainder part of the lode is capel, full of veins or faces of copper ore, which shows a good indication of having a good lode at a deeper level.

KELLY BRAY.—M. Edwards, July 20: There is no alteration in any of the ends or pitches in the western or deepest part of the mine since my last report; the remarks I made on them then will equally apply to them now. In the eastern part of the mine the men have commenced sinking the engine-shaft; and in the adit west about 4 ft. under the 30. The winch shaftmen are at present cutting a pit in the 30; as soon as this is completed they will also commence sinking, and both these shafts will be continued to the 45, with the utmost vigour and despatch. We recently sold a small parcel of silver ore, raised in the back of the 60, which realised 1000, per ton.

LADY BERTHA.—J. Metherell, July 23: Moyle's shaft is down 6 fms. 4 ft., and of the same character as reported last week. The lode in the 20 west has improved; the ore part is about 2½ ft. from the bottom of the level, which is worth 1 ton per fm. We have commenced driving a cross-cut north, in the eastern end, in the same level. Nothing else new in the eastern end in the 10.

MOLLAND.—Thomas Bennetts, July 22: In the 20 east we have a hard, large lode 3½ ft. wide, composed principally of white iron and quartz, spotted with yellow copper ore, though not much to value. The stope in the back of this level are much the same in value as last week—worth 40, per fm. In the 5 east the lode is poor, and mixed up with kilias. The ground, however, is a little harder than we have seen it for some time past. The stope in the back of this level are worth 40, per fm.

NANTESON AND PENHITH.—J. Lester, July 20: The lode in the 50, east of Fenrich engine-shaft, below adit, continues very hard, containing occasionally spots of ore. The 20 west is at last reported, small and poor. The cross-cut driving south in the 10 has not cut into any more lode since last report. In the bottom of the 10, east and west of the winze, will in about another week be worth 2 tons of ore each per fm. The stope in back of this level do not look so well as I expected as they have done, these stope are now about 6 fms. from surface. The stope in other parts of the mine continue much as usual. The lode driving west of cross-cut, at Eystumean, is the same as last reported. The lode in the cross-cut, 9 fms. west of ditto, is looking promising, containing a mixture of muddle and lead ore.

—T. Paul, July 23: I went through the principal part of this mine yesterday with Capt. Lester and H. Bondy. In the 20 east the ground is still hard and unproductive; in the 20 west the branch of crystallised lead has been cut through since I was there last, and for 3 or 4 fms. the lode was very poor; but yesterday, shortly before we were there, a branch of lead was again cut in the bottom of the end of the level, which was then looking very promising. In the 10 east a cross-cut is being driven south through a few fms. of level; this will be continued until the end of the month, when men will be put to stop the east of the level, and the large bunch of ore was cut some months back, and to follow the ore, which, judging from appearance, must be standing to the north of the level. At this point a great improvement may be expected very shortly. In the 10 west nothing has been lately done, but it is intended to continue the level to cut the ore gone down from the bottom of the adit. The 20 west adit, and the stope, I did not see, but they were said to be looking not quite so well. A branch of lead was laid in the 30 to the Bwlch Gwyn shaft, which driving west is in a large lode, containing a great quantity of iron pyrites and a little lead. The men here will continue driving to the end of the month, and if nothing more favourable is discovered will then be put to rise in the ore ground in the back of a small stope at this point, where there is a good branch of lead, which it is intended to follow. The cross-cut from the adit has cut the lode, which is here also very full of muddle, with a little lead; the lode is very wide, and it is intended to drive through it at this point, which is under the best ore ground in the bottom of the old workings. There is such a quantity of iron pyrites, both at Eystumean and Penrith, that it would be very desirable to have it analysed, and endeavour to get a sale for it. Shall I send you a sample for the purpose?

SOUTH DOLGOATH AND CARNARTHEN CONSOLS.—W. Roberts. The 70 and 40 west are progressing favourably, but without any particular since last reported.

with all speed. The stratum is of very fine sandstone, and we are prosecuting the easting with all possible speed. I hope we have got the lode in one of the pits, but cannot say positively, as we have not come on it this morning. You shall hear from me in a few days respecting the same.

— J. Gifford, July 28: I beg to inform you we have found the Bedford

ferring to this subject, states that experiments have decided that a boat
and 8 ft. wide, could be propelled by side wheels six or eight miles an ho-
ur by horses at three or four miles, and not damage the banks half so
much as boats were towed on the Erie Canal, at five miles an hour, the look after

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DONALD were within half a mile, from the water rising and
know when the boats were within half a mile, from the water rising and
the gales, but with the steam-vessel above referred, at six or eight miles
rise would not be one inch till the boat entered the lock. On one side
that as a single screw would be insufficient, two should be employed; w
and to strenuously advocated on the ground that

* * **LEAD AND TIN.**—The Quarterly Returns of Lead and Tin will be published in next week's Journal. We shall be glad to receive information, that the particulars may be given as correctly as possible.

METAL MARKET. *London, July 24, 1857.*

MINES.—The aspect of the mining share market has improved since our last Journal, and the week opened with an active demand for shares generally. Tin has risen altogether 10l. per ton, as we thought it would, and we dare to say that it will not be long before there is an advance in copper. An improvement at Sorthridge Consols, going west, a point of the greatest importance to this mine, the ore hitherto being east, towards North Robert, caused a demand, and shares rose 1l. each (12,000l. on Monday, and they left off, after a good business, at 2½ to 2¾; other mines in the district are also creating more attention; Devon Consols 435 to 445. In East Russell a considerable business has been done at 30s. to 36s., the price leaving off at 30s. to 32s. 6d.; this mine is looking better, and if the bottom levels are extended east, a good mine may be opened. Dolcoath shares are in demand at 300, and no sellers; thus we see the oldest and deepest tin mine in Cornwall, having been worked for more than 100 years, not only maintaining its position, but beating the best mines in Cornwall; the reserves are said to be very large, and the rise in tin will materially add to the profits. Bassetts are enquired for at low prices, 220 to 230; South Frances still flat, at 285 to 290; West Basset, 27 to 28; the two-monthly dividend, 4500l., or 16s. per share was declared on Wednesday. North Bassetts, 13 to 14, flat; and while there is a great disposition to sell, many are watching the market to see how low shares will drop, and when will be the right time to purchase.

count, 1955, 7s. lid., saving balance against mine, 2007, 13s. 10d. It was resolved that the necessary dams be put in the various levels, and the ground secured to prevent the water flowing from the eastern mine into the western, and when completed the pitwork at new engine-shaft to be drawn up and, together with the 00-in. engine sold. Capt. R. Williams and J. Williams reported that the boundary engine-shaft was nearly secured and repaired to bottom, and when completed they would immediately fix a lift in the 115 ready for sinking to the 123. There were 40 pickmen employed on the tin ground, and from appearance calculated raising 7 tons of tin per month.

The Fortuna Company have their report from Spain to July 13:—**Canada Inco's Mines:** West of engine-shaft, the lode in the sixth level, east of El Cielo winze, is large and promising, its value is 5 tons per fm. The branch of the lode at Addie's shaft is at present worth 1 ton per fm. The lode in the fifth level, east of Fullon's winze, is worth 1 ton per fm. The lode in Buena Prochecion winze is worth 1 ton per fm. The lode in the fourth level, west of O'Shea's shaft, contains stones of ore, but not to value. East of engine-shaft, the lode in the fifth level, east of Taylor's whim-shaft, contains stones of ore, but not to value. The lode in the fourth level, east of La Fortuna shaft, is worth 1 ton per fm. The value of the lode in the second level, east of Lowndes's shaft, is $\frac{1}{4}$ ton per fm.—**Los Solidos:** The branch of the lode in the end of the third level, west of sump-winze, is worth $\frac{1}{4}$ ton per fm. but we think there is more lode standing south, and have turned the lode in that direction. The lode in the second level, west of Cordover's winze, is worth $\frac{1}{4}$ ton per fm. The third level, east of sump winze, was driven last month 5 fms. 1 ft. 4 in. and the men were set to rise against La Luz winze, on a lode worth 5 tons per fathom. The company have not yet decided whether to continue the lode, or to go down and raise a new shaft. We shall recommence driving the end immediately, and shall be enabled to work the pitches in the winze with greater advantage. To the east of Colorado's shaft we have commenced a new whim-shaft, San Pablo; it will commence

side with the central of three winzes, east of Colgan's shaft, and below the first level, and we are in hopes it will open up for us a valuable piece of ground.

The Wildberg Mines report states.—The bargains now at work are worth for silver-lead ore as follows:—The slope north, on the newly discovered ore from the Erze Kammer, is improved since last reported, and is now worth 7 tons per lachter. The part of the lode on which we are driving the end, east from the No. 1 sink, Unbrück's level, is worth 5 tons, and the driving east on the newly discovered course of ore, from the No. 2 Blumengraben sink, is worth full 6 tons per lachter. We shall also resume the following bargains on ore ground forthwith:—The No. 2 sink, Unbrück's level, to deepen below the middle driving, worth at present 7 tons of silver-lead ore per lachter; and the end to drive west from the No. 4 sink, worth 3 tons per lachter. Two bargains in the east Blumengraben rise, worth 3 tons per lachter per each bargain; and two on Beck's north lode, worth 2½ tons per lachter. The lode in the bottom of Michael's shaft continues just as last reported, worth from 7 to 8 tons per lachter. The crushing-mill will be resumed to-morrow, and washing on Monday next.

The Cologne Mining Company have issued the report in anticipation of the fourth annual general meeting, to be held on Friday next, from which the subjoined summary of operations is extracted:—

“VAHLBERG.”—The engine-shaft has been sunk 10 lachters deeper, and a cross-cut driven thence to the hanging lode, which we cut in the middle of May, and promises fully to equal in quality and thickness the lode in the 10 lachter level. Two cross-cuts have been driven 50 lachters apart, in the direction of the laying lode, which is not yet reached. A reference to the annexed statement (No. 1) shows the quantity of iron-ore extracted during the past year. Towards the south we came on unprofitable ground, behind which, after working about 3 lachters, the lode contained richer ore than we had yet found, being partially mixed with manganese of very superior quality. After cutting through this ore for several lachters the ground again became mixed with quartz, granulate, and sphatose ironstone, in which state it remains. We could at this moment double our monthly production, but unfortunately the difficulty of procuring carriage is so great that we cannot hope to command a steady market for it before the Sieg-Ruhr and Deutz-Giessen railroads are completed, both of which will run within 6 miles of the Vahlberg Mine. We endeavoured by reducing the rates of ore to find purchasers for such quantities as would produce sufficient money to cover monthly expenses, and form a fund for re-payment of the 4s. advance, but our efforts have, as yet, been unsuccessful. We have, however, reduced our monthly cash outlay by a contract effected with parties who have undertaken to furnish us with coal, taking ironstone in exchange, which will have a monthly outlay of from \$300 to \$500, or 150l. to 135l. sterling. Still we cannot at present depend on monthly sales to cover monthly expenses, and must, therefore, devise means to find funds for such a contingency as slack sales, or close the mine until the railroads are opened.

FAHREBERG.—On the 11th ult., at noon, a breach was made from the deep adit level into the shaft, raising the mine to a depth of 29 lachters, and enabling us now to extract ore without interruption. It is upwards of a century since this adit level was commenced, and we are thus reaping the benefit of the capital and labour expended by our predecessors and ourselves, the fruits of which promise to be rich.

CACILLA.—It is much to be regretted that want of funds prevents our erecting an engine on this mine, which for the past year has been worked to a profit, yielding a monthly surplus after paying all expenses. During the recent visit to the mine of Mr. R. W. Sievier he gave some valuable plans for crushing, stamping, and jigging the Cacilla ore by water-power, a process which can be adopted at slight outlay, will greatly reduce the expenditure for wages, and of course considerably increase the monthly surplus. With a small engine we could deepen our works at this mine, and nearly triple its production, for which we can ever command a ready market, as indeed we can for all our ores except those of the Vahlberg.

A statement of accounts is also issued, which shows assets in London and Cologne 1093l. 1s. 2d.

The directors of the Chancellorsville Company continue to receive returns of gold from their works at Frodsham according to the previous average. The additional grinding power and accessories necessary for the reduction of 60 tons per week are being steadily and rapidly proceeded with.

At Sortridge Consols meeting, to be held on Monday, the accounts will show.—Balance last audit, 2074l. 15s. 7d.; ore sold, 2146l. 3s. 10d.; balance of interest and discount account, 43l. 7s. 11d.—5104l. 7s. 4d.—Mine cost, April, 529l. 16s. 11d.; May, 583l. 9s. 9d.; June, 535l. 5s.; Dec., 149l. 0s. 7d.; income tax, 39l. 1s. 9d.; Capt. Richards's salary, 15l. 15s.; Mr. D. Cohen's salary, 31l. 10s.; leaving balance in favour of mine, 3261l. 5s. 4d. The profit on three months' working has been 360l. 9s. 9d. The amount of assets over liabilities is 3551l. 3s. 4d. The committee, in their report, congratulate the shareholders on the greatly improved prospects of the mine. The discovery of rich ore in the 40, west of Hitchin's engine-shaft (where there is a lode 15 ft. wide, yielding 2 tons of ore, worth 10l. per ton, per fm., with every prospect of improving), is an event which has been anxiously looked for by the agents, and the committee trust it will, when further developed, considerably increase the returns of copper ore, and ultimately place the concern in a permanently dividend-paying position. Capt. Richards is making a complete survey of the mine, and will prepare a full report for the meeting.

At the London and West of Ireland Fishing and Fish Manure Company meeting, on July 18 (Sir J. Burgoyne in the chair), it was agreed to abandon the present system of fishing on their own account; and, secondly, to continue the purchase and curing of fish, and fishing on the shore system. It was, however, suggested and approved that a committee of the shareholders should be formed to confer with the directors, in order to determine the nature and extent of future operations. Mr. W. C. Wright was appointed auditor in the place of Mr. Coleman. The proceedings terminated with a vote of thanks to the Chairman.

At the Commercial Bank of London meeting, on Tuesday (Mr. Mark Hunter in the chair), the report stated that the balance-sheet for the year ending June 30 showed a net profit of 26,810l. 14s. 7d., after deducting current charges, and making provision for bad and doubtful debts. The directors proposed to declare a dividend of 4 per cent. for the past half-year, making with the dividend already paid 7½ per cent. for the year, free of income tax. After payment of this dividend there will remain a sum of 41,091l. 14s. 9d. to be carried forward to the profit and loss new account for rebate of interest on bills not yet due, and a further sum of 14,091l. 14s. 9d. to be added to the reserve fund, which with the annual interest will then amount to 73,292l. 19s. 10d. It will be seen that the business, and consequently the profits, of the bank have been much reduced by the unfounded and injurious rumours circulated in the autumn, which were brought to the notice of the proprietors at the meeting held in December last. The directors are happy to state that the explanations then given had the effect of entirely satisfying both the proprietors and the public of the strength and solidity of its position. The directors could not expect, in the face of active competition, immediately to recover the ground then lost, but they have the satisfaction of stating that some of the accounts which had been withdrawn have since returned, and that many new and valuable accounts have been opened in the present year. The balance sheet showed a dividend at the rate of 7½ per cent. per annum for the half-year for 1856, 10s. 6d.; and at the rate of 10s. 6d. for the half-year for 1857, ending June 30, 1857, 13,000l. rebate of interest on current bills, 41,091l. 14s. 9d.; balance carried to guarantee fund (making that fund 73,272l. 19s. 10d.), 14,091l. 14s. 9d.—78,101l. 7s. 7d.—The Right Hon. Major Beresford, in moving the adoption of the report, considered the affairs of the bank were conducted in a safe and honest manner. He believed there was no bank in the position of the Commercial Bank, having 34 per cent. in hard cash to meet any demands. Mr. Brown seconded the resolution, which after some discussion was unanimously agreed to. Messrs. Charles Butler, John Alfred Chowne, John Savage, and Joseph Thompson, the retiring directors, were re-elected. The meeting was then made special for the purpose of altering the 7th clause of the Deed of Settlement, which made the minimum number of directors sixteen, and which it was proposed should be altered to twelve. The Chairman stated that when they made the alteration in the Deed of Settlement, in accordance with the wish of a number of shareholders, the meeting would be held half-yearly, and it would be necessary to call a second meeting, to confirm such resolutions. The proceedings terminated with a vote of thanks to the Chairman and directors.

At the Union Bank of Australia meeting, on Monday (Mr. R. Campbell in the chair), the report showed the following statement of liabilities and assets at the branches, on Dec. 31, 1856, and at the London office on June 30, 1857:—Liabilities: Circulation, 413,319l.; deposits, 2,396,336l. 3s. 11d.; bills payable and other liabilities, 1,171,043l. 3s. 10d.; balance of undivided profits, 79,237l. 5s. 5d.; reserve fund (invested as per cent.), 300,000l.; paid-up capital, 630,000l.—5,510,706l. 16s. 11d. Assets: Specie on hand, 1,112,103l. 10s. 11d.; bullion, 91,352l. 2s. 11d.; bank premises and property, 99,032l. 0s. 10d.; bills receivable, &c., 4,009,464l. 5s. 5d.; investment of reserve fund, New Three per Cent. Consols, 300,000l.—5,079,860l. 16s. 11d. The statement of profits showed:—Balance of undivided profits, June, 1856, 91,767l. 6s. 7d.; out of which a dividend was declared by way of interest amounting to 86,100l.; leaving a balance of 5667l. 6s. 7d. The accounts are now to be added the profits of the past year ending at the branches on Dec. 31, 1856, and at the London office, June 30, 1857, 69,692l. 14s. 7d. Deduct income tax for year, on the average of the last three years, 14,000l. 7s. 7d. A dividend of 10 per cent. on the balance of 5667l. 6s. 7d. and deduct amount of increased reserve against loss on doubtful debts, 79,237l. 5s. 5d. The Chairman stated that they intended to have two inspectors in future, which would guard them against bad debts; in the item of income tax, they expected a reduction from 14,000l. to 5000l. per annum. The most satisfactory accounts continued to be received from the various branches. A dividend at the rate of 9½ per cent. for the half-year, free of income tax, was declared, and the retiring directors re-elected, the proceedings terminating with a vote of thanks to the Chairman and directors.

At the Scottish Australian Investment Company meeting, yesterday (Mr. W. H. Dickson in the chair), the accounts showed a net profit of 17,555l. 4s. 5d. A dividend at the rate of 10l. per cent. per annum was declared. The proceedings are reported in another column.

The Scinde Railway meeting, yesterday, it was stated that the recent discovery of coal in Scinde, in the neighbourhood of the terminus of the railway, was calculated to exercise a powerful influence in facilitating the development of the resources, not only of the valley of the Indus, but of the whole of North-Western India; and the establishment of steam transit along the valley would be an additional reason for the same kind of commercial enterprise being introduced into the sister valley of the Euphrates, and thus complete the shortest route between Central Asia and Europe.

At the Madras Railway Company meeting, on Thursday (Major-General Danes, jun., in the chair), the accounts showed a balance profit for nine months of Rs. 7,367 9 11, the working expenses for that period having been 50½ per cent. of the receipts. The opening of the further section of the railway between Arcot and Vellore had been effected. A regiment of infantry was carried through from Madras to Vellore in April, and on May 7 the line was opened for traffic between these points—a distance of about 81 miles. The further opening to Gorakhpur was expected to be accomplished before the end of the year, making altogether a distance of nearly 100 miles of railway. Mr. John Hawkshaw had been appointed consulting engineer, in the room of the late Mr. Rendel, and Mr. J. M. Heppel chief engineer, in the place of Mr. Bruce, who was compelled to resign from ill health. The report was unanimously adopted, and a vote of thanks to the Chairman terminated the proceedings.

The National Discount Company meeting, on Thursday, was a stormy one, the absorption of the half-year's profits in bad debts leading to the manifestation of an angry feeling on the part of some of the proprietors. The appointment of an auditor, being the special object for which the meeting was convened, did not take place, being postponed to a future occasion. The directors' report and accounts, however, were received and adopted.

We understand that Mr. Thomas Chandler has been appointed secretary of the London Dock Company, in the place of Mr. J. D. Powles, who recently resigned Mr. Chandler has been many years in the service of the company as superintendent.

The Spanish journals state that an important layer of auriferous quartz has just been discovered in the Sierra de Caneles, province of Almeria.

In Miscellaneous Shares, the market has exhibited a decided improvement, and a considerable amount of business has been done throughout the week. Joint-stock Bank shares have also been in demand at higher prices. The quotations will be found in another column.

In Foreign Mines, the principal feature has been in Cobalt Copper, which, in consequence of the unfavourable report, continues to droop, and was dealt in yesterday at 4½ to 4¾, being the only transaction officially marked. Imperial Brazilian closed at 1¼ to 1½; St. John del Rey, 11 to 13; United Mexican, 3½ to 3¾. The other quotations will be found in the usual columns.

LEEDS, JULY 23.—There is nothing cheering to report from this place, as far as mining is concerned. The Yorkshire Mining Company have not yet got the rich vein they have so long anticipated, and the Craven Moor proprietors are not so sanguine of their property as they were some two years ago, when they were about to declare their injudicious dividend; this is, however, deemed by the best judges to be a good property, if properly mined. The Penrose Company are taken by surprise at the cost to develop their mine, which promises eventually to be a splendid property, and shares have declined considerably; this progressive mine is undoubtedly cheap at present quotations (about the value of the plant); few transactions, however, take place in this or other stocks. The Merrifield Mine appears to be very quiet, though it made a great stir when first launched, and has a capital sufficient to try an extensive test, and good names of adventurers. We hear little now of the Greyfriars Mine, which was so much talked of some six months since; and Wheel Henry, a Cumberland mine (How comes the prefix of Wheel into this county?), is not filling up its share list so fast as could be desired, though it is understood both these are splendid properties.

Our Hull correspondents (Messrs. T. W. Flint and Co.) report that the share market continues without alteration, but a tendency to firmness is perceptible, and an indisposition to do business will probably continue until the arrival of the Indian news, which is certain to cause a movement one way or the other, and perhaps to some extent, especially if it be of a definite and important character.

Our Sheffield correspondent (Mr. George Wilson) reports that there is no improvement to notice in the mining share market during the last week, and the quotations remain about the same, which are about as follows:—Brightside and Froggatt Grove, 4¼ to 4¾; Chapel Dale, ½ to ¾; Crafnant, 1½ to 2; Eram, 56 to 59; North Derbyshire, 1½ to 2; Peak Union, 2 to 3; Prince of Wales, 2½ to 3.

DELAWARE SLATE QUARRY.—In the Vice-Chancellor's Court, yesterday, a petition was presented, under the Winding-up Act, for dissolving this association. The company was formed in 1854; two persons, named Gordon and Ford, assigning their interest in the slate quarries to other parties, as trustees for the company. The consideration for the assignment was certain shares in the company, and 700l. in money, to be paid at a future time. The payment of the 700l. was secured by a mortgage to Pearce and Faine of the quarries, and all machinery which might be erected thereon. The company commenced business, but not being successful, it came to a stoppage. After these circumstances, Pearce and Faine presented this petition, claiming as creditors and shareholders of the company. The Vice-Chancellor considered that this was really an attempt to set up the debt of 700l. as against the company. He did not think it a fit case for a winding-up order, and refused the application, with costs.

FEARFUL COLLIERY ACCIDENT.—At Messrs. Caldwell and Co.'s, Gerard's Bridge Colliery, near St. Helen's, a new engine was taken to the engine-house to ascertain the working of the new engine by watching the night engineer, Thos. Scott, and there he remained all night. At six in the morning Scott left him in charge of the engine, saying that all the men were down. Shortly after Scott had left, John Pilkington and two others employed in the mine, desired the engineer to let them down. They got in the cage, and the usual signal was given to lower, which was instantly obeyed, and the cage proceeded rapidly down the shaft for about 40 yards, when it suddenly was reversed, and ascended the shaft as quickly. The pit mouth was reached, but the cage still kept ascending, and when near the top of the headgear, a height of about 20 yards, John Derbyshire jumped out, and fell to the ground. The cage was still drawn up, and came violently in contact with the headgear, broke it, and all were precipitated to the ground—John Pilkington being killed on the spot, and Joseph Frodsham, severely injured. The engine was still going, and the cage drawn through the engine-house wall and against the engine. The engineer, Samuel Ball, was found guilty of manslaughter by the coroner's jury, and committed for trial at the assizes. Poor Frodsham appeared at the inquest, being carried late to the room, and placed in a coffin, and was dislocated and fractured, and he was severely shaken, but he gave his evidence in a clear manner. The two others lie in a dangerous state.

CUTTING THE ROPE OF A COLLIERY.—Several nights ago, some cowardly villain entered the premises of Mr. Charles Thawley, Swallow Colliery, situated in a field adjoining Dodsworth Road, Barnsley, and cut through two strands of the rope used for the drawing of coal. The only object that the villain could have in perpetrating such an act would be that of killing or seriously injuring the first person who might descend the shaft the following morning, by the breaking of the only remaining strand of rope. In this he was, however, disappointed, as Mr. Thawley commenced by first drawing water, and he discovered the state of the rope on drawing up the first tub. It is to be hoped that the miscreant will be discovered and brought to justice.—*Sheffield Independent.*

MINER ACCIDENTS.—A boy, named Ninnis, fell away in Wheel Mary, and received a frightful wound in the head.—As the son of Daniel Rowe, of Kenwyn, was at work in Great Wheel Busy, a scale of ground fell on him, breaking one of his arms, and fracturing his under jaw in several places: the poor fellow is deaf and dumb.

POWER OF COAL.—It is interesting to compare the dynamic force of coal applied as fuel to the generation of steam in the steam-engine, with the dynamic effect of a man. The human labourer, exerting his strength upon a treadmill, can raise his own weight, say 150 lbs., through a height of 10,000 ft. per day, equivalent to 1 lb. raised 1,500,000 ft. The mechanical virtue of fuel is best estimated by ascertaining the number of pounds which a given quantity, say one bushel, will raise to a given height, say one foot, against gravity. In the steam-engine this is called the duty of the fuel. Now, the present maximum duty of one bushel of good coal, in the improved Cornish steam-engines, is equivalent to 100,000,000 lbs. lifted through one foot; but one bushel has been made to raise 125,000,000 lbs. one foot high, or one pound 125,000,000 ft.; but as there are 84 pounds in one bushel, this divisor gives one pound as equal to 1,500,000 ft.; just the result of a man's toil for one day upon a treadmill. Thus a pound of coal is really worth a day's wages. If we estimate a lifetime of hard work at 20 years, giving to each year 300 working days, we have for a man's total dynamic effort 6000 days. In coal this is represented by the amazingly small amount of three tons. Another proof of the extraordinary power derivable through the combustion of fuel is presented in the following calculation—one cubic inch of water is convertible into steam of one atmospheric pressure by 15½ grains of coal, and this expansion of the water into steam is capable of raising a weight of one ton to the height of a foot. The one cubic inch of water becomes very nearly one cubic foot of steam, or 1728 cubic inches. When a vacuum is produced by the condensation of this steam, a piston of one square inch surface, that may have been lifted 1728 inches, or 144 ft., will fall with a velocity of a heavy body rushing by gravity through one-half of the height of the homogeneous atmosphere, or through 13,500 ft. This gives a terminal velocity of 13,000 ft. per second greater than that of the transmission of sound. From this we can form some estimate of the strength of the tempest which alternately blows the piston in its cylinder, when elastic steam of high pressure is employed. Applying the calculations of the dynamic efficiency of coal, for estimating the mechanical strength latent in the coal fields of the earth, or in the large coal product annually furnished by the mines of Great Britain, we get some interesting results. Each acre of a coal seam, 4 ft. in thickness, and yielding one yard nett of pure fuel, is equivalent to about 5000 tons, and possesses, therefore, a reserve of mechanical strength in its fuel equal to the life labour of 1600 men. Each square mile of one such single coal bed contains 3,000,000 of tons of fuel, equivalent to 1,600,000 men labouring through twenty years of their ripe strength. Assuming for calculation, that 10,000,000 of tons out of the present annual product of the British coals—55,000,000—are applied to the production of mechanical power, then England annually summons to her aid an army of 3,300,000 fresh men, pledged to exert their fullest strength through twenty years. Her annual expenditure of power, then, is represented by 66,000,000 of able bodied labourers. The latent strength resident in the whole coal product of the kingdom may, by the same process, be calculated at more than 400,000,000 of strong men, or more than double the number of the adult males now upon the globe.—*American Railway Times.*

ENORMOUS NUGGET.—The Downville Tunnel Company, California, have discovered a nugget, which it is estimated contains not less than 20,000l. worth of gold. It is said to be not so large as one which was previously found in the same locality, but far richer in gold.

IMPORTANT DISCOVERY IN THE IRON TRADE.—Mr. John Harding, managing partner in the Beeston Manor Ironworks, Leeds, has just patented an improved method of freeing ironstone and other metal ores from shale and other extraneous matter, which promises to be a really invaluable discovery to the iron trade. To those not acquainted with the mode of winning ironstone and preparing it for the blast furnace, it may be necessary to premise that the iron ore is imbedded in shale, which must be removed prior to the ore being sent to the blast furnace. Hitherto this has been accomplished by spreading the ore on the surface, and subjecting it to the action of the weather, until the shale is sufficiently loosened to allow of its being chipped or “napped” off the ore by manual labour. This is a work of months and years, and it is not only a long but also a costly process, in consequence of the number of men necessarily employed in spreading, chipping, &c. Mr. Harding's discovery dispenses altogether with the necessity for subjecting the ore to the action of the air, and by the application of steam accomplishes in two or three hours that which has previously occupied one or two years. It is also as simple as it is efficacious and economical. The cost of the new process must be very small, as compared with the old; whilst the velocity of time and labour (and consequently of capital) must be immense. The invention, we are informed, has been given by some of the leading men connected with the iron trade in the district, who at once saw its value and efficiency.—*Leeds Mercury.*

BLACK TIN. Sold on the 17th and 18th July.

Mines.	Tons c.	lb.	Price per ton.	Amount.	Purchasers.
Great Hwas United	6	3 11	675 0 0	4045 0 0	Calcutta.
ditto	12	15	64 0 0	768 0 0	ditto
ditto	0	2 25	73 0 0	471 13 3	Charlestown.
ditto	1	0 27	64 0 0	64 15 5	ditto

LEAD ORES. Sold on the 15th July.

Mines.	Tons.	Price per ton.	Purchasers.
East Wheel Rose	43	£18 5 0	Newton, Keates, & Co.
ditto	21	16 5 0	ditto
ditto	15	17 0 6	ditto
Badnick Consols	8	17 17 6	ditto

Mines.	Tons.	Price per ton.	Purchasers.
Nant-y-Car	15	11 3 0	Walker, Parker, & Co.
ditto	4	13 4 0	Newton, Keates, & Co.
Rhwydyol	22	15 13 0	Walker, Parker, & Co.
Dyffryn	24	15 18 0	Newton, Keates, & Co.
Tydwyl	25	15 17 6	Walker, Parker, & Co.
Dyffryn	33	15 18 6	Newton, Keates, & Co.

Sold on the 21st July.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
Cwm Sebon	15	22 11 0	Walker, Parker, & Co.		
Nant-y-Car	23	15 6 0	ditto		
Penhalgarn	9	22 10 0	Sims, Williams, & Co.		

COPPER ORES. Sold on the 18th July.

Mines.	Tons.	Price per ton.	Purchasers.
Cwm Daren	10	£ 5 8 0	Sims, Williams, & Co.

COPPER ORES. Sampled July 1, 1857, and sold at Swansea July 21, 1857.

Mines.	Tons.	Produce.	Price.	Mines.	Tons.	Produce.	Price.
Cobalt	120	13	£12 1 0	Burra Burra	39	18½	£18 16 6
ditto	111	12½	12 1 0	ditto	39	18½	18 11 0
ditto	107	12½	12 5 0	ditto	34	18½	19 1 0
ditto	89	12½	12 5 0	Knockmahon	98	29½	4 11 6
Berehaven	123	10½	9 18 6	Springbok	18	29½	29 6 6
ditto	96	10½	9 18 6	Wheel Maria	17	29½	24 1 0
ditto	73	10	9 10 6	Namaqua (T. W. & Co.)	11	24	24 14 0
Burra Burra	50	22	21 10 6	ditto	2	28	28 6 6
ditto	47	21½	21 7 6	ditto	1	14½	14 0 0
ditto	34	21½	22 0 0	Walwick Bay	8	37½	37 18 0
ditto	49	20½	20 11 0	Dyffryn	37	34½	7 8 0
ditto	7	20½	20 11 0	Bampfyde	49	20½	20 8 6
ditto	6	21½	21 7 6	Molland	29	10	6 1 6
ditto	4	17½	17 4 0	Sydney	5	10	8 17 0
ditto	61	21½	21 3 6	Browhead	15	—	22 12 6

TOTAL PRODUCE.

Mines.	Tons.	Produce.	Mines.	Tons.	Produce.
Cobalt	427	£5194 0 0	Walwick Bay	8	£ 303 4 0
Berehaven	292	2568 18 0	Dyffryn	49	550 7 0
Burra Burra	367	7509 17 6	Bampfyde	37	746 9 0
Knockmahon	98	448 7 0	Molland	29	178 5 6
Springbok	18	526 19 0	Sydney	5	44 5 0
Wheel Maria	17	409 5 6	Browhead	15	339 7 6
Namaqua (T.W. & Co.)	14	342 7 0			

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Company.	Tons.	Amount.	Company.	Tons.	Amount.
Copper Miners' Company	54	£ 556 13 9	Freeman and Co.	161½	886 15 9
P. Grenfell and Sons	269	3103 0 0	Sims, Williams, Nevill, and Co.	2½	2 2 6
Vivian and Sons	130	1446 10 0	Williams, Foster, and Co.	17	349 19 0
Mines Royal Company	17	479 19 0	Splitty Copper Company	17	151 12 0
British and Foreign Copper Company	50	1275 12 0	Mason and Elkington	167	3378 13 0
F. Bankart	158	2344 19 0	Havenhead Copper Company	34	1824 5 0

Total 1376 £19,250 10 6

Copper ores for sale at Swansea, Aug. 4.—Berehaven 130, 122, 112—Knockmahon 87, 78, 73—Cobalt 101, 100—Burra Burra 48, 46, 42, 1, 33, 5, 1—San Fernando 82, 80—Serrill 47, 46—Chill 53, 52—Hollyford 35, 12—London Slag 28, 4, 3—Wh. Maria 19, 1—Malaga 19—Sydney 12—Namaqua 9—Mount Gabriel 6, 1—New Walwick Bay 2—Australian 1—Spanish 53, 1, 1.—Total, 1600 tons.

AVERAGES.

Produce.	Price.	Standard.
British	9 11-16	£ 9 6 6
Foreign	17½	16 13 0
Sale	14 7-16	£ 14 0 0
Totals—British, 528; Foreign, 848=1376 tons (21-cwts.)		£112 9 0

COPPER ORES. Sampled July 8, and sold at the Royal Hotel, Truro, July 23.

Sampled July 8, and sold at the Royal Hotel, Truro, July 23.					
Mines.	Tons.	Price.	Mines.	Tons.	Price.
Devon Great Consols.	127	£7 19 0	Hington Down	40	£6 9 6
ditto	120	8 1 6	Bedford United	99	7 7 6
ditto	113	3 15 6	ditto	95	2 12
ditto	112	3 14 0	ditto	66	4 18
ditto	109	3 12 0	Wheal Friendship	63	4 4
ditto	102	3 13 0	ditto	58	14 7
ditto	100	3 12 6	ditto	57	6 10
ditto	91	7 12 6	Duke of Cornwall	61	2 6
ditto	88	3 13 6	ditto	60	3 7
ditto	86	7 0 6	ditto	57	3 17
ditto	82	6 8 0	Wheal Edward	86	3 15
ditto	81	6 8 0	ditto	57	3 18
ditto	70	2 12 6	ditto	51	13
ditto	47	8 3 6	Collacombe	91	5 15
ditto	40	3 18 0	ditto	69	4 15
ditto	34	3 19 0	North Wheal Robert	55	7 9
ditto	33	3 7 0	ditto	46	3 10
ditto	29	3 0 0	Gawton Copper	95	3 17
ditto	27	3 0 0	Wheal Arthur	58	3 5
ditto	24	6 2 6	ditto	35	1 8
Phenix Mines.	86	5 17 0	Tavy Consols	48	2 18
ditto	85	4 6	ditto	35	5 10
ditto	83	4 17	South Bedford	72	2 18
ditto	72	3 13 6	Kelly Bray	13	5 6
ditto	53	3 15 6	ditto	13	5 2
ditto	37	16 14 6	Wheal Zion	54	3 17
West Caradon	102	7 0 6	Wheal Emma	53	6 10
ditto	82	7 8 0	Devon Wheal Buller	50	6 19
ditto	68	6 19 0	Devon and Courtenay	25	3 2
ditto	60	8 4 6	ditto	7	11 0
ditto	48	3 13 6	Wheal Capid	24	7 5
Hington Down	77	4 11 0	East Wheal George	16	4 7
ditto	68	8 11 0	Evian's Ore	3	3 13

THE PROGRESS OF MINING IN 1856.

By J. Y. WATSON, F.G.S., Author of the *Compendium of British Mining* (published in 1848), *Minerals among Mines and Minerals*, &c.

THE THIRTEENTH ANNUAL REVIEW OF MINING PROGRESS appeared in a SUPPLEMENTAL SHEET to the MINING JOURNAL of Jan. 3, 1857.

A FEW COPIES OF THE REVIEW OF 1855, containing Statistics of the Metal Trade, the Dividends and Per Centage Paid by British and Foreign Mining Companies, and the State and Prospects of upwards of 200 Mines. Also, A FEW COPIES OF THE REVIEW OF 1853, 1854, and 1855, MAY BE HAD ON APPLICATION at Messrs. WATSON and CUELL'S Mining Offices, 1, St. Michael's-alley, Cornhill, London.

Also, STATISTICS OF THE MINING INTEREST. By W. H. CUELL.

WATSON AND CUELL'S MINING CIRCULAR, published every Thursday morning, price 6d., or 1s. per annum, contains Special Reports of Mines, and the Latest Intelligence from the Mining Districts, from an exclusive resident agent; also, Special Recommendations and Advice upon all subjects connected with Mining, and interesting to investors and speculators. A Record of Daily Transactions in the Share Market, and of the Shares of the principal Mining Companies, &c. Edited by J. Y. WATSON, F.G.S., and published by WATSON and CUELL, 1, St. Michael's-alley, Cornhill.

N.B. Looking at the causes for the present depression in mining shares, Messrs. WATSON and CUELL have made a selection of a few dividend and progressive mines to pay good interest, with a probability, also, of a rise in value, the names and particulars of which will be furnished on application.

INVESTMENTS IN BRITISH MINES.—MR. MURCHISON'S REVIEW OF BRITISH MINING FOR THE QUARTER ENDING 30th June, 1857, with Particulars of the Position and Prospects of the principal Dividend and Progressive Mines, Tables of the Dividends paid in the past Quarter, and in the Years 1855, and 1856, and a MAP OF THE GREAT WHEAL VOR and LELANT MINING DISTRICTS, &c., is now ready, price 1s.; at Mr. MURCHISON'S office, 117, Bishopsgate-street Within, London.

Reliable information and advice will at any time be given on application. Also, COPIES OF "BRITISH MINES CONSIDERED AS AN INVESTMENT," by J. H. MURCHISON, Esq., F.G.S., F.S.S. Pp. 356, boards, price 3s. 6d., by post 4s. See advertisement in another column.

CORNISH AND DEVON MINING ENTERPRISE, By R. TRENKLE, Mining Sharebroker, Gresham House, Old Broad-street, London. Facts and Statistics recorded, Synopsis of Dividend Mines, Plan of the Buller and Basset District, a Clear and Succinct Description of the chief Mines. All interested in such investments should possess a copy. Price 5s. bound.

ST. IVES, LELANT, AND TOWEDNACK MINING DISTRICT.—MR. TREWEEKER begs to inform his friends and the public generally that his MAP of the above DISTRICT, and a STATISTICAL ACCOUNT thereof for the past 30 years, is NOW READY, and will immediately be sent to any party who may require a copy, on the receipt of 14 postage stamps. Dated Uxley Lelant, Hayle, April 9, 1857.

HOPTON'S PLANS FOR VENTILATION OF COLLIERIES: showing separated Winds, that will Prevent all Serious Explosions in Coal Mines. On the same sheet, the Works and Ventilation of the Lund Hill Colliery are represented. Price 3s. May be had at the Mining Journal office, 26, Fleet-street, London. A notice of Mr. Hopton's invention appeared in the Mining Journal of 30th June.

PATENT AGENCY (Established above 20 years). PROVISIONAL AND COMPLETE PROTECTION, AT MODERATE CHARGES. Just published, **ADVICE TO INVENTORS ON PATENTS, CAPITAL, AND CONTRACTS (BRITISH AND FOREIGN).** Free by post. Apply to Mr. H. DICKES, engineer, City Patent Agency Office, 32, Moorgate-street.

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Also, full Directions for the Formation, Registration, and Incorporation, of Joint-Stock Companies, together with the Authorized Regulations for Management of the same, and all necessary forms. By THOMAS TAPPING, Esq., Barrister-at-Law. Author of the "Readwin Prize Essay on the Cost-Book System," &c., &c. London: Mining Journal office, 26, Fleet-street; and all booksellers.

Notices to Correspondents.

* Much inconvenience having arisen, in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly filed on receipt: it then forms an accumulating useful work of reference.

MINING BANK ACCOUNTS.—In the improvement of mine management, and upon which nothing is more essential to its profitable working, even with fair lodges, there is one part of it which appears to me absolutely necessary for the safety of the shareholders. It is that every mine ought to have its bank account, only to be operated upon by cheques signed by two members of committee and the manager. No doubt pursers are honourable men generally, but we all know how many mines have been brought low by the exceptions. And, besides, now that banks allow interest for money in their hands, the profit of that money should belong to the shareholders, however much or little it may be. I would recommend adventurers to adopt a resolution if I have come to—to hold in no mine where a bank account is not kept specially in name of the mine or of its committee.—A. SUFFRAN and Old Subscriber: *July 20.*

THE GOLD QUESTION.—I perceive by the several communications that you have inserted this question is exciting some attention. What is now required is that there should be a practical solution of it. I do not wish to throw any doubt on the discoveries of the modern alchemists, but I do certainly say that it is time the public should receive from them more than mere assertions. I am prepared to follow any or all of them through the labyrinth of science, and to undergo all the dangers which are consequent upon the penetration of the mysterious arena, which involves the labours of those who deal in the production of gold. We have read of numbers of the theories of their predecessors, whose maxims was not to make gold, but get it from the pockets of their dupes. The great Earl of Leicester, Sir Philip Sydney, and several of the greatest men of the age of the "Virgin Queen," were the guile of those unprincipled adventurers, not the least remarkable of whom was the celebrated Dr. Des. With the impostures of that generation we have nothing to do; our ancestors paid in hard cash the penalty of their folly, and as far as regards the affair is one of those things that are past. In our own time we have had a gold mania: this was followed by a gold delusion. Since then we have had several accounts published of how to discover gold—now by electricity, then by acids. It would be invidious here to mention names, or throw any doubt on either companies or individuals; the best test of their success would be to see that these clever persons, who would be the first to receive any increase to their material wealth. I do not care whether the *aurum* is to be discovered by electricity, the humid or the dry way, or under what auspices it may be ushered before the world; but if these gentlemen would not be classed with the charlatans of a former century, they will not be required to discover their secret, but they will show the gold they have attained by their wonderful processes.—AMALGAM.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.—I perceive that our late esteemed superintendent, Sir Henry Huntly, has been forwarding to the Earl of Malmesbury some valuable suggestions as to the employment of Kroomen in the West Indies, the habits of these people having been learnt by Sir Henry Huntly during his seven years' residence at the River Gambie. I think it a matter of regret, especially to the shareholders of this company, that the Government did not retain the services of the gallant knight among the blacks; he would have been far more usefully, although perhaps not so profitably, employed as he was in California, while discharging the cash of the proprietors of this association. I remember when this company was first started, by Mr. Luke Williams and Mr. William Chevin (of the Metropolitan Bread Company), that they made a tour through the provinces, meetings were harangued, the Governor of Prince Edward's Island was paraded, and on the faith of his name several of the shares were taken. At that time we had also a live baronet on the directors. For long period things went on swimmingly; the superintendents in California, however, could not act with his colleagues in London, and the two first directors retired; their scrip was exchanged, and at one period it was expected that a collision would take place between the out-going and in-coming directors. Would it had! as probably the company would have been dissolved, and a portion of our capital, wrong from us by delusive promises, would at least have been restored. The hardships our superintendents was at that period suffering (vide Mr. Massey Dawson's speech, 1855), lying under a tree, &c., while comfortably ensconced in a first-rate hotel in California, induced us to pause, and thus we remained, led on by specious promises and fruitless expectations, until May, 1856. It was only at that late period the film fell from the eyes of the Chairman and his co-directors, and they were sensibly alive to the true state of the concern. From their present spathy, I am led to believe that we shall hear no further of them. We must consider the past as a bad job; we, like other corporations, have suffered by placing our affairs under the guidance of men of high-sounding names but with no business habits. They have allowed themselves to be deceived, and thus have been the means of deceiving others. The lesson has been dearly purchased, but we must fain be content. To some it may be a consolation to know that in this company there has been nothing fraudulent; this money has been disbursed right royally, and I believe that our directors would have asked, and our superintendents would have spent whatever amount of money had been forwarded. Everything that has a beginning must have an ending, and there has now been a limit to our patience and pockets. The sine of omission and commission have ruined one of the finest properties in California; but had the quarts in Brown's Valley been trable the value it was it would have been no use to us, unless there had been an entire change in the management, both at home and abroad. An action is now pending between Sir Henry Huntly and the directors. I trust that this may not be compromised, and that we shall be put in possession of all the facts, not only as to how the money has been appropriated, but how these repeated mortgages have been constantly occurring and accruing; and, lastly, that the mystery of a working mine seizing a property for a large debt—its being notorious as was a poor man—will be satisfactorily explained.—LUX: *London.*

DOUBLE TURNER.—In your last Journal you state that Mr. A. Leeson has patented an invention in which the water is carried up through a syphon-like canal to supply a second wheel. From this description, I should presume that the water to supply the second wheel is carried beyond the lowest level of the first before it is discharged, and if so, the raising of the water would counterbalance to some extent the power which would be obtained under ordinary circumstances. Perhaps Mr. Leeson has overcome some difficulty; but if he has not, I think his invention would be practically useless. However, great a fall there might be, a single turbine of the largest possible size would be the best that could be adopted, as the lever power would therein be greatest.—H. L.: *Isle of Man, July 21.*

Tax Goto Question.—If Mr. Low, as he says, has operated on hundreds of tons of quartz, perhaps he will be kind enough to say whence the quartz was procured, and the result of 100 tons, as he may rely such extensive arrangements are not generally known. If remunerative, Mr. Low must surely be already in a position to carry out the process to any extent; if not, as I previously said, from a small way he may soon expand it to a vast extent. If Mr. Low will state the results upon 100 tons, and show the produce, he will soon set the matter at rest, with or without the aid of a SPECTATOR.

MINING INSPECTION.—In the Journal of last week I perceive that the Clarendon Mining Company have received a report of their property from Mr. A. Trengrove, in which that gentleman speaks very highly of the prospects of the mine. Can any of your readers inform me if this is the Mr. A. Trengrove who was dispatched by the directors of an association to report on the Dalecarlia Mine, in Sweden? The gentleman, whoever he was, gave such a bad account of these on his return to England, that they were abandoned, and a great loss was consequently thereby entailed upon the unfortunate shareholders. Since then they have been taken up by the Swedes, and are now, although but inefficiently worked, returning large profits. I am not aware what quantity of lead was raised by the English proprietors, although, from all that I have gleaned, the greatest energy was practised in the share market, and the property, as it has since turned out, although a good one, was not worked with that degree of spirit which its merits demanded. Many companies are too often got up for the sole purpose of trafficking in shares, the object of legitimate mining being entirely overlooked.—J. C.: *Old Jersey.*

RESCUE LEAD MINE.—"K. R." (Dolightly).—Much of the information sent could only appear as an advertisement.

JOINTED BOATS.—"L. R." (Bwlab).—The first mention of boats formed of several compartments occurs in the writings of Valerius, who gives drawings of a boat of wicker, covered with hides; it was made in three compartments, united by hooks and eyes, to form a pontoon, and worked by six oars. Chinese vessels in 14 compartments were used in 1271. All the information that "L. R." requires will be found in the official abridgments of specifications relating to marine propulsion, published at the Great Seal Patent Office.

MINING MEN.—"Black Jack" should recollect that we cannot describe all the meritorious at once; that as far as we have gone we have given the tale of Man and Justice Jack's fair share of notice. If "Black Jack" has reached a career, he will see praise has been given where it is due; and the name Millicent not having been so treated, is no reason why it never shall.

TUNNELING MACHINE.—The *Scientific American*, referring to Captain Penrice's machine, which has already been alluded to in the *Mining Journal*, says that in its construction and operation it differs from Wilson's American tunnelling machine, which cuts into the rock by a series of rotating cutters, and is not subject to the violent concussions attendant on this English one. As Capt. Penrice's invention was considered by many to be very near perfection, it is very necessary that he should state whether any inconvenience arises from the concussion, as although a machine may accomplish a vast amount of work, the cost of working it may render it for all practical purposes useless.—J. C.: *City, July 20.*

ARMY MINING COMPANY.—As I suspected when I perceived the property was about to be put in liquidation, a hitch has taken place. How could it be otherwise, when the claimant is a man of such high standing and such a high reputation? I am sorry to hear that the money which the Messrs. Mackenzie expect to receive from the Grimaldi estate to hand, I trust, that when the expenses are apportioned they will not forget a gratuity to recompense the claims of one person, who has always been connected with the company, and in some shape or other been a sort of *amicus curie*; several offices he has filled, and had he been now a liquidator, I am well convinced he would not have allowed the Grimaldi estate to trifle with him. We know how laboriously he has worked; his exertions with the trustees are a sufficient testimony to that, and he has done much for the property which would never have been transferred to the Grimaldi estate, and we should thus have lost the benefits we have derived from his services. The money, I trust, will be obtained quietly, without the need, I hope, of his intervention; his day of battle may be said to be past. He is not yet superannuated, and may stand up in good stead should his services, which I say Heaven forefend, ever be required. Therefore, I say, "Dante Beatissimo Bolus."—MONTAGUE: *Lodgegate, April, July 25.*

CATHERINE AND JANE CONSOLE.—"A Shareholder."—Having been appealed to by name, I have the pleasure of replying to "A Shareholder" that I am glad to find any one on the alert touching the real state of matters in these mines. "A Shareholder," I infer, has one of those peculiarly constituted minds (doubtful if amiable) which leads him to look upon a mine as a piece of property which, by virtue of some what he calls himself, he would have a right to demand from the management, and thus the questions he propounds appear to have been asked publicly, in order to put somebody in the wrong. Vale of Towry and Wheal Wrey are already established mines, enjoying their full complement of machinery for all purposes, having "all other appliances and means to boot," and paying dividends, and hence their sales of ore. Catherine and Jane is a newly-worked mine, driving levels, and having one "stop" only, just begun, which is "workings" of a very different nature from the extensive stopes and pitches in the mines above mentioned; and for these reasons, and other appearing to be getting the better of the mine, the management, and the support in the most economical manner, the shareholders were invited to supply new capital, which they now have most cheerfully done. "A Shareholder" may rely that in due time the ore from this mine will figure in the ticketing lists. Mr. Crofts takes this opportunity of respectfully tendering a word of advice to all shareholders. Let them take advantage of a week's leisure, which most can command in the summer time, and see the mines they are, or may wish to become, interested in. Whether they prove *aurum*, or things that possess something more than a name, it is very easy for those means for any one to judge, and in any case the enquirer will be benefited by the elicitation of truth.—J. C.: *1, Finch Lane, Cornhill.*

TAYNOR'S CONSOLE.—In the report of Capt. J. Phillips, in last week's *Journal*, for "will produce 1½ ton of ore per fm." read "½ ton of ore per fm."

RAILS WITHOUT SPRINGS.—Some time since, you published a description of an invention, by Mr. Wright, for substituting cast-iron sleepers for those of wood, now in use, and I should be glad to know whether it has been adopted by any company, so as to test its applicability. I fear the fault lies in the heavy description of sleeper proposed, and the consequent cost of employing them. If the cast-iron system is best, would it not be a far cheaper mode to run a ¼-inch plate the entire length of the track, and rivet bridge-rails thereon, the gauge being kept by cross-pieces of similar plate, extending beyond the track—say ¼ foot? I think if this plan were adopted, the bridge-rail might prove more economic than the ordinary double-headed rail; and I have no objection to its being tried, but I doubt that this form of sleeper would be as effective as anything which has been proposed. In new countries they would be particularly useful.—H. J.: *City, July 21.*

CATHERINE AND JANE CONSOLE.—In your last *Journal*, I noticed a just enquiry relative to this mine, made by one who calls himself "A Shareholder"—his question was, if the ground be worth 25 cwt. of lead per fm. in two parts of the mine, and 15 cwt. in another part, as reported by Capt. Trowles for so many weeks, where is the ore, and when are the sales to be made? It was also reported in your last *Journal*, by the said captain, that one part of the mine yields 55 cwt. of lead per fm. If that be true, the mine is a good paying concern, as the stratification of this country is kind, can be driven for about 51. per fm., and the lead worth at least 101. per ton; so the mine must be paying well. But if you refer to your *Journal* for the last few months, you will find that the mine was worked on a very small scale, according to the report, except to find on the bank about 45 tons of lead ore, but the bulk, I believe, will be found rather short of that. I have something to do with a mine in the same district as Catherine and Jane Console, so I ought to know a little about the ground and the quantity of ore on hand.—F. RAY: *Panama.*

THE NAUTILUS DIVING MACHINE.—From a recent search among the very valuable collection at the Library of the Patent Office, I find the principle upon which this machine is constructed has long been known, and that it was, therefore, unnecessary for Major Sears to watch the actions of the Nautilus, as he could have observed the defects of the previous inventions, and made his model accordingly. It must not be supposed that I consider his invention an infringement of any previous patent, or that it was not patentable, but simply that by observing what has already been done in any particular branch of industry much labour and expense may be saved. In 1853 a large metal vessel for diving purposes was described by J. A. Borelli, of Rome. It was filled with air, and enclosed a man's head, being secured and made water-tight round his neck, a circular glass window was in front of his face, affording him the means of carrying on his subaqueous operations. Round his waist there was a cylinder holding air, and furnished with a piston moved by the hand, acting on rack-work, so as to increase the volume of air in the cylinder, and thus enable him to rise to the surface, or to descend to any depth he pleased. Major Sears's is an improvement upon palling a man up by the neck, but the same principle is involved, and might have offered some suggestions worthy of adoption. Mr. D. Papin, however, in 1695 described a submarine vessel, some of whose parts might now, I think, be advantageously applied in the Nautilus. He states that the air was drawn in through a tube by a siphon pump, the vitiated air escaping by another tube, whilst a third enabled the diver to use implements against an enemy's ship. In the reign of James I., a submarine vessel was tried on the Thames, with twelve rowers, besides passengers; the vitiated air was removed by a liquid. In the Nautilus full power might be given to the diver to supply himself with air, if it be not already done, in case of any accident to the pipe connecting the bell with the machine at surface, and perhaps care or a screw might be used to assist in the propulsion of the vessel.—H. C.: *City, July 21.*

SULPHURUM.—Mr. Joseph Jones has, as I see by your last *Journal*, made a discovery in chemical science of as great importance as the discovery of Sir Humphry Davy. It has hitherto been supposed that sulphur was a simple combustible non-metallic substance, of a peculiar yellow colour—this is Dr. Ure's definition, and he further adds that it is an abundant product of nature, existing sometimes pure or merely mixed, and at other in intimate chemical combination with oxygen and various metals, forming sulphates and sulphurets. As I do not consider that chemistry has reached anything like the perfection to which it will attain, but rather that a future time our notions on the subject will be regarded with as much ridicule as we regard the attempts of the old alchemists to produce gold by combining and manipulating various base metals, &c., I am willing to admit that Mr. Jones's discovery might really be what he considers it to be, but upon the rough assertion that he has put forth, I am inclined to think that he has obtained his results in consequence of want of care in conducting his experiments. He says the metal is of the same class as arsenium, silver, aluminium, &c., and that the oxide of sulphur is the refuse of the manufacture of sulphuric acid. Now, sulphuric acid is manufactured, ordinarily at least, by the combustion of sulphur with nitre (nitrate of potash); then as sulphuric acid is a combination of sulphur, oxygen, and water, the question is what becomes of the potassium and impurities of the sulphur? They, no doubt, form part of the refuse, and combined with the other refuse matters, form what Mr. Jones pleases to designate oxide of sulphurium. As he says that the metal is of the same class as arsenium, silver, aluminium, &c., and as potassium and aluminium might be easily mistaken for each other by an inexperienced hand, I do not hesitate to suggest that Mr. Jones may have produced an impure potassium, which he has mistaken for the new metal, or that he has mistaken arsenium for it. I am sure that he has not, and as it would be interesting to many to know what he has really discovered, even if it be but that potash produces potassium, I trust that he will not allow the subject to be left in its present unsatisfactory state.—E. D. H.: *July 21.*

CHANCELLORVILLE COMPANY.—We have received several letters of enquiry as to the proceedings at Frodsham. An announcement from the company appears in another column; and had other statements been forwarded to us for publication they would have been inserted.

WAGES AT TAVISTOCK.—The letter of "T. D." shall appear in our next *Journal*.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, JULY 25, 1857.

The improved aspect of mining affairs, which we have for some time predicted as certain to occur within the summer, appears to be now commencing, a decidedly improved tone and feeling being prevalent. Indeed, British mining has now withstood so many crises, that nothing else could have been anticipated. It was morally impossible it could have been worse, and have existed at all. Matters have turned out precisely as we predicted. It will be remembered we urged the purchase of shares in dividend and progressive mines which had been unduly depreciated, though they were, and had been, returning considerable quantities of ore; that they were only desired either to suit dealers' purposes, or the insane mania for or against certain neighbourhoods; that many such properties were in the market at positively less prices than the bare cost of the machinery and materials on the mines, to say nothing of the time and labour expended in their development. An instance of this kind is afforded by the discovery made in a certain celebrated mine during the week. This mine, on its first existence being made known, about four years since, almost set the mining world wild by its extraordinary productiveness, and rich quality ores found near the surface. Shares ran up to a great price. A change in the lode occurring, as will happen in all lodes, and it having been asserted by some wiseacre that the mine was only a "squat of ore at surface, and was unbottomed," the news spread like wildfire, supported as it was by the candid assertions of the captains, that the mine was not looking so well, and by the sales of ore falling off. "Evil news flies apace," and Rumour, with her thousand tongues, spread and exaggerated the tidings as quickly and correctly as the story of the "three black crows." Nothing could stop the downward tendency of prices of shares for a time. To reason with parties on the imprudence of fostering or giving way to such reports was futile, subjecting persons so advocating the true principles of mining to be taunted either with partiality or ignorance. True, this is but one instance, but we can point to a score such as this mine was only two weeks since, and shall most assuredly, ere long, have to report successes equally great from some others. If proprietors of mines similarly situated will not have the confidence to protect their own properties, by holding on their interest in a time of temporary depression, and paying their calls when necessary, how can they reasonably expect or hope the public (who by the way, if they wish to purchase, have an interest in depreciating prices) will do otherwise? Many persons who have once got the crochets into their minds that the mine will not "make out" become the scabbed sheep in the flock, and poison all the rest.

Now that the money market has become decidedly easier, considerably more business will be doing in home mine adventure; the foreign schemes and visionary Utopian "associations" (a softer term than adventures) have nauseated the public, not only by the failure of the speculations themselves in point of returns of metals, but also by the gross deception and fraud in the home management in the very offices of the companies, amounting in several instances to a greater sum than would suffice to prove an extensive home adventure.

The more we examine the status of British mining, the more fully are we convinced it has a sound basis, an improving management, and an illimitable demand for its products—iron, coal, tin, and copper especially.

We have also called attention to prices of ores as causes of alarm, and pointed them out as being merely temporary, caused chiefly by the machinations of the smelters, who work the strings behind the scenes to suit their own convenience. This will be the case until there arise an independent competitive company. This, then, will be done; if not accomplished by home means, it will ere long be so by foreign agencies. Symptoms of this are already apparent. The tin millionaires have been taken completely aback at the sales of Banca and Straits last week, and have at last made the grand discovery, that there are capitalists who can afford to purchase stocks of metal as well as themselves. What has been in tin will be repeated in copper. They are now glad to fall back on the tinner, and raise his prices to something like a fair figure, lest the produce fall off. Had tin kept at the low figure the smelters lately quoted, in the face of the Dutch sales, many mines would have declined stamping and returning their low ores, consequently an amazing quantity of black tin would have been kept out of the market. It may be depended on as certain, that in the present state of society the demand for all metals will be comparatively regular and increasing, *pro rata*, with population and social progress; that trifling variations cannot be permanent, and can only exist to an extent alarming to no one but the inexperienced and the timid.

An advance of 7½ p. ton—from 130s. to 137½.—For block tin is certainly very considerable, and very acceptable; but since this announcement was made, smelters have again found it convenient to demand a further rise of 3d. per ton. These advances have caused a revived demand for shares in tin mines. This ought to have been altogether a fresh, instead of a revived demand, as shares in tin mines should not have been so heedlessly and suddenly thrown on the market by the late fall. At the time of the reduction in price we pointed out the cause, and the merely temporary effect that would be likely to result; it is now proved we were correct.

The prospects of the tin miner are most encouraging, it being now proved beyond doubt that stocks are extremely low, as are also those of copper. Zinc is high: from its widely-spreading consumption, we see no prospect of any decline in its value, so as materially to affect it. Lead is firm, and we think it most advance. Iron and coal can hardly be produced sufficiently fast to meet requirements. Tin streaming alone forms the exception. Nearly all the the Cornish streams are exhausted; stream tin, consequently, commands extraordinary prices. Trade being now active in the manufacturing districts, it is more than probable grain tin will yet advance still higher. On the whole, therefore, the prospects for the miner are as great and good as those of the agriculturist, and his certainly never more brilliant.

By the accounts produced at the late meeting of the Great Cobre Mining Company, we find these mines have fallen off in supply to the amount of nearly 3000 tons of ore during the last year, and that the quality is deteriorating, thus demonstrating that even the very richest deposits vary in productiveness. But should such a circumstance militate seriously against the property? We say decidedly not. Unless the mines have been unduly forced to an improper and unwarrantable value, and this is as wrong as the other extreme, the next mail may bring news of a completely opposite character. Again, we say, let the owners of properties such as we have before more than once alluded to, take heart, act vigorously, and take our advice; enable the mines to be developed with spirit—they that hesitate are lost. To the capitalist we also say, take advantage of these times; there never was such an opportunity for investment as there lately has been, and now is, for purchasing into progressive and dividend stocks. We do not thus strenuously advocate investment from selfish motives—we have no private ends to serve; we do it from a conviction of public duty, and a sincere desire to forward those interests we feel convinced are for the general weal and greatness of this country, and from these principles alone.

Mr. KENBALL has obtained the consent of the House of Commons to have the evidence given before the Committee over which he presided printed. We trust that the ultimate result of the sifting investigation which the Rating of Mines question has had, will be the satisfactory settlement of the principle upon which the tax, if it must be levied, shall be calculated. There is, in our opinion, little doubt that the report will be favourable to the exemption of all mines, other than coal mines, from the payment of poor-rate; although it may probably be decided, that where the mineral is carried over the roads the highway-rate shall be contributed to. The justice of such a decision no one would doubt; and as the majority of the mines already pay this latter tax, the effect will be almost equivalent to leaving the question as it previously stood; with the important difference, however, that those mines which have been unjustly compelled to pay the rate will henceforth be placed upon a more equitable footing. Should it unfortunately be resolved to further burden the miner, we must repeat that it will be a policy exactly the reverse of that adopted by every other European country; and there can be no question

that the first opportunity will be taken to obtain the repeal of such a measure, as in practice it will be found ruinous to our national industry, from the fact that it will prevent us from competing in markets in which we now enjoy almost a monopoly.

The result of the examinations of the pupils at the Bristol and Cornwall Mining Schools, a brief résumé of which we have recently published, are certainly of the most satisfactory and cheering character, plainly showing the necessity and utility of such institutions; those, indeed, have often been shown in argument, but are now decided by proof. The circumstances of Mr. URBAN, who it will be remembered was recently only a working miner, obtaining the first mathematical prize, and the remarkable instance of natural mental calculation possessed by JOHN WALKER, also a working miner, whose surprising feat we chronicled last week, show that the rough material exists, and only requires the polish of education and experience to bring out the latent talent in its true colours. It will be seen, in the "Mining Memo." we publish from time to time in our columns, that several of this class have distinguished themselves in various branches of science, by their own unaided efforts. What the schools may do, as soon as their utility and practicability become better appreciated, is impossible to predict; certain it is, however, the session just concluded has gratified the founders, and surprised the examiners—a most encouraging beginning, truly.

The fact of Mr. Wood having obtained the 50th scholarship, and of the other students so conspicuously distinguishing themselves, cannot but have a good effect on the young men in the mining districts, where a spirit of emulation and a desire to excel will doubtless be awakened and fostered. They will now see merit is really to be taken by the hand and encouraged, and that promises are not to end in mere words. The same remarks apply to the Bristol, and all other similar students. These cheering results are but the first fruits, or rather the dawn of a brilliant future. When it shall have been made apparent by practice that the youths so educated will have the priority of choice in the selection of captains, managers, and agents for extensive establishments, where liberal salaries can be afforded (which in all probability will be the case), the prejudice so long existing, but now happily fast disappearing, will be wholly exploded. The motto of society is progress; its path is onward. The times we live in will admit of no retrograde motion or inactive, supine practices; it must advance. The man who hesitates is lost; if he keep not in the van, the great mass of mankind, in its irresistible impulse, heads him not, and he is lost for ever to the world. There never was, perhaps, a path so direct or so palpable as the miners' for progress and improvement.

If Mr. URBAN possess the talent for lecturing, which is as necessary almost as the knowledge of the subject itself, no more appropriate person could be selected to visit the mining districts on that errand, as he would be an *ex-quo* example of what had been and, of course, what may be done by application; he would doubtless confirm many who hesitate, encourage those who aspire, and would be an invaluable instance to working men of what they may in a degree also become, if they but apply themselves and diligently study the particular branches of science to which their tastes and nature prompt them. The sensible and practical remarks of our correspondent "G. H.," would be met, and we doubt not Mr. URBAN's appearance would attract crowded audiences, when the fact of his being one of themselves would have a weight of influence and a bearing which would be of the most beneficial kind.

It will be seen by the reports the course of studies pursued embraces every variety of science having reference to, or being practically applicable to, mining, including the most difficult problems and assays: when we reflect the school has been but two years in actual practice, much progress has undoubtedly been made.

How many mine captains of the present day, who are eminently practical men, thorough good miners, as far as the knowledge of ground or the nature of lodes are concerned, are unable to dial and put their mine into map to scale, or commit their ideas to paper for the instruction and use of others? who cannot name or assay the ores and minerals discovered in their mines, and who would give their two ears for such accomplishments? How much information has thus far ever been lost? These reflections, true as they are, should not forcibly not only on the objects to be instructed themselves, but also on the great body of persons interested in such pursuits. It is much to be regretted that the petty rivalry, differences of opinion, and senile ideas of certain parties should have negated the splendid and magnanimous offer of Sir CHARLES LEMON to endow such a school. It is to be sincerely hoped that, although by such means it was stultified, Sir CHARLES may live to witness the present effort crowned with such signal success, that he may yet be induced to do something for the benefit of an establishment approaching so nearly the purposes and practices he desired, that it may attract and command the attention the magnitude of the necessity demands, and to meet that public and private encouragement in capital and respect these institutions richly deserve. We trust a few years only will elapse ere such schools become general. The incipient effort at Sticker,* near St. Austell, is a worthy example of a move in the right direction. We hope its humble commencement may be followed by distinguished success, as well as its more pre-eminent contemporaries.

Telegraphic advices have been received from our Australian colonies, by the arrival of the *Simla* at Suez, with dates from Sydney to May 25, and from Melbourne to May 30. These accounts are necessarily meagre, and we must wait the delivery of letters via Marseilles for details, and which is very uncertain. In consequence of the break-down of the *Onida*, no mail was dispatched on May 15, the usual time, from Melbourne; and the *Simla*, which in due course ought to have remained for the succeeding mail, of June 15, was sent forward on May 30; consequently, no vessel was at Alexandria to meet this unexpected arrival. The bags were brought hence to Malta by the French mail steamer, and there they remain, and will do so, probably, until the *Ambrisa* brings on the Marseilles portion, and the *Bina* or *Jura* the heavy part, to Southampton. It is quite possible, therefore, we may be without further intelligence until the regular time at the beginning of August, unless one of the vessels of the Peninsular and Oriental Steam Company brings on the bags; and as there is an Indian mail shortly due, the delay may be obviated. This unfortunate accident to the *Onida* has completely disarranged the postal communication with our Australian colonies, as there was no vessel to take her place, the being the first sent out from England to commence the contract via Suez. There is not the slightest difficulty in the route itself.

The new administration in Victoria had been formed under the presidency of Mr. HAINES, who was head of the Executive displaced by the vote of the House, which led to the entrance into power of Mr. O'SHEA and his party, who subsequently succumbed to the adverse resolution of Mr. FELLOWES.

On the arrival of the *James Baines*, to which we alluded in our last number, all our contemporaries stated that the new Cabinet had been formed by Mr. McCULLOUGH; but our correspondent led us to a different, and as it now appears right, conclusion—that Mr. HAINES had been sent off as well as Mr. McCULLOUGH, but whether to act independently or in concert with the latter gentleman did not then appear, but the co-operation of these two gentlemen was the evident object in view. We now learn that Mr. McCULLOUGH takes the chief seat at the Customs, which is position of great importance, and tantamount to our President of the Board of Trade.

The cabinet as now constituted is not a mere return of the old party to power, but is infused with much liberal spirit. In no way could it be more evident than by the nomination of Mr. McCULLOUGH, who is the ex-president of the Melbourne Chamber of Commerce, a body of gentlemen to have always advocated liberal and progressive principles, and firmly resisted the executive in every attempt at monopoly, or Government interference with private enterprise; Mr. EDWARDS, Colonial Treasurer, the second post in the Ministry, but probably meant for SLADE, who held that position previously; Mr. HAINES; Mr. DAVID MOORE, President of the Board of Works; Mr. MICHELS, Attorney-General; Mr. FELLOWES, Solicitor-General; and Mr. MITCHELL, Postmaster-General.

The last overland mail from Melbourne was to April 16, and a few letters were brought by the *James Baines* of the date of April 25; therefore, the next communications will be 14 days later than by the last regular mail, but we may expect much important and interesting information. We learn that the markets generally were very brisk, and commercial

confidence quite re-established. The railway from Melbourne to St. Kilda had been opened. This is the second line which has been finished and brought into full working order in the colony, and at this moment of consideration of railway extension in Victoria, it is important to mention that both are the results of private enterprise, without asking any guarantee of interest from the Government, resting solely on their own merits; and the result of the Hobson's Bay line shows that the returns in dividends far exceed any rate which the Government would have been warranted in granting. The St. Kilda line branches off from the Melbourne and Hobson's Bay Railway, and runs coastwards towards Brighton, its ultimate destination, and to which the line is progressing. On a former occasion we alluded to the extraordinary position of the Melbourne and Hobson's Bay line, as respects the traffic returns, which averages 720^l. per mile per week, while English lines give an average of only 47^l. per mile per week. It is no wonder, therefore, that the shares are readily saleable at 34^l. prem., the last quotation being 84^l. on 50^l. paid.

The third line of railway is that of the Geelong and Melbourne, which has likewise been carried through by private means—indeed, almost entirely by capital from this country; but this has a Government guarantee of 5 per cent., and there is every reason to believe that it is also open to the public, although the telegraph is silent thereon, inasmuch as by the April mail we were led to believe it would be so in a few weeks.

Further gold fields have been discovered between Belfast and Warrnambool, in Victoria; and in the sister colony of South Australia, gold quartz reefs had been found on Crown lands. The discoverers are in Adelaide, prosecuting their claim for the Government grant.

The amount of gold shipped for England prior to May 30, exclusive of 241,266^l. received by the *James Baines*, is 1,121,686^l. being 406,588^l. by the *Great Britain*, 405,844^l. by the *Swiftsure* and *Indomitable*, 208,672^l. by the *Sardinian*, *Lightning*, and *Summer Cloud*, and 40,582^l. by the *Simla*.

Some interesting particulars in connection with the question of dockage transpired during the debate in the House of Lords on Monday evening on the subject of the Mersey Conservancy Bill. They are especially important at this moment, when efforts are being made to provide dock accommodation in various colonies, such as at Table Bay and Simon's Bay, at the Cape of Good Hope, and Port Phillip Bay, in Victoria, where there is a total absence of these necessary adjuncts of the shipping interests. The want of docks in Victoria furnishes good ground of argument for those who are now advocating postal communication via Panama, instead of via Suez, between the mother country and the Australian colonies, because there are docks at Sydney and none at Port Phillip Bay, but the defect in reference to the last-named place is likely so soon to be removed that the reason assigned becomes invalid.

It appears, from the statistics furnished in the debate, that the docks at Liverpool were commenced in 1710, and then occupied an area of five acres, since which they have been extended, at different periods, until the ground which they now cover is no less than 200 acres, in a continuous line of 16 miles. During the year ending June 24, 1857, the number of vessels which went in were 22,032, representing an aggregate tonnage of 4,645,362, and, consequently, an average tonnage of 210 per vessel. For the accommodation, therefore, of 4,600,000 of tons no less than 16 miles of docks are required in the river Mersey, where there is every possible facility of loading and discharging, irrespective of docks; yet in our Australian colonies, which export merchandise of an annual tonnage of 1,600,000, which is equal to one-third of the tonnage docked at Liverpool, there is no dock accommodation whatever in Port Phillip Bay, whence the greater proportion of the exports issue. The value of the exports in 1856, from the different port in Victoria, comprising Portland, Belfast, and Warrnambool, was 16,000,000^l. and of this sum 14,500,000^l. were shipped from Port Phillip Bay—that is, Melbourne and Geelong. This amount comprises wool, tallow, hides, and other articles of general commerce, and does not include the precious metals, which, of themselves, are equal to nearly 14,000,000^l. making the total export value 30,000,000^l. from this colony generally, of which 28,500,000^l. comes from Port Phillip Bay. About half a century since the total exports of the United Kingdom were of the value of 18,500,000^l. so that the exports of Victoria alone are 12,000,000^l. more than those of the mother country even so recently as 50 years back. It is argued, therefore, that the Australian colonies exercise a more sensible influence upon the commerce of the world than did England at the end of the 18th century, and yet this enormous traffic is carried on without those advantages to the shipping trade which other countries enjoy, in the shape of docks; although it is notorious that in Port Phillip Bay may be seen the finest collection of clippers from London, Liverpool, Glasgow, Bristol, &c. No wonder, therefore, that strenuous efforts are now being made for the construction of docks, and it is only astonishing to find that such enterprising men as the Victoria colonists have not long since removed the difficulty. Eligible sites present themselves in Geelong Harbour and Hobson's and Port Phillip Bays: indeed, Nature seems to have prepared the way, at some points, and nothing is wanting to carry out the project but energy and capital, and of neither we hear, will there be any lack, for a London company, with powerful colonial support, will be speedily announced for carrying out this important object.

The NORTH BRITISH AUSTRALASIAN COMPANY hold a general meeting on Monday next, for the purpose of re-modelling its constitution, and the shareholders are earnestly solicited to attend, if they desire to take part in a question which affects their future progress and prosperity to a large extent. The object proposed is, to place the company under the Joint-Stock Companies Act, 1856, with limited liability, and the regulations circulated amongst the proprietors are those to be submitted for approval, and are open to amendment only at this meeting. Surely the shareholders will not so much stultify and forget themselves as to leave the discussion of important alterations to the small number of their body who have been usually present at the annual and special meetings, and who have, undoubtedly, conferred so little benefit in their past proceedings. The shareholders are again reminded that this is an occasion upon which at least one-half, and not one-tenth, of their body should present themselves, to protect the interests of the company, and to ensure that continuance of prosperity which the late management have so auspiciously begun. All public companies are ready to adopt retributive measures when their affairs are looking black, but common sense suggests a preventive course to avert unhappy results, and the largest amount of wisdom should be collected together to realise a proper conclusion.

The regulations submitted for the future conduct of the business are in conformity with the Joint-Stock Companies Act, although a portion is extracted from the present Scotch deed of copartnership, and incorporated therein. The important features of the new deed may be thus summarily described. The business of the company remains the same as before; power is taken to increase the share capital of the company from the present amount of 188,676^l. to 250,000^l.; to forfeit shares upon which the calls remain unpaid, and this clause will apply to the outstanding scrip, on which 10s. is paid; to charge a sum not exceeding 3s. 6d. for registering the transfers of the company and issuing certificates, which was formerly done for 2s. 6d.; to hold annual general meetings, the business of such meetings to begin when 20 shareholders are present, representing 10,000 shares; to vote by proxy upon all matters; the management to be vested in a board of six directors, and the qualification for such office 200 ^l. shares, and after the first year one-third of the directors to retire annually; the directors to be paid 300^l. per annum; the accounts of the company to be audited by one or more auditors to be appointed, and the qualification for holding such office 50 shares, the remuneration 20^l. each; and in clause 75 of the new deed power is retained to alter the regulations of the company at general meetings, provided such alterations have first received "the previous sanction of a majority of the directors."

There are a few clauses upon which we propose to remark. The one just quoted is perpetuated from the old deed, and one more obnoxious or dangerous to the interests of a public company cannot be conceived. For instance, if a general meeting of shareholders wish to amend any clause of their constitution, for the better working of the company, they are unable to do so, although each shareholder agrees in the desirability, without the previous sanction of a majority of the directors. Shareholders, can you adopt anything so preposterous as this, placing the whole power into the hands of your servants, who may for any one year set you at complete defiance? It is most insulting to the common understanding that shareholders shall not deal with their own property as they think best, without first asking permission of four gentlemen out of a proprietary of nearly 1100 shareholders. This clause should be rejected if the company is to be successful, and to merit prosperity. At the meeting held on the 13th inst., the Chairman, in speaking of this very identical clause in the old deed, took occasion to say they (the directors) did not make it; but if

they did not originate it then, they are now attempting to foist it upon the shareholders, by perpetuating it in the new deed. Such a dangerous power should not be confided to any managing body, and we hope the shareholders will do their duty by rejecting, without discussion, the words "with the previous sanction of a majority of the directors for the time," in the 75th clause. The office of managers is to be abolished, and the conduct of the business is to be vested in the hands of six gentlemen, who may only hold together 1200 shares. With every feeling of respect for those who may fill this responsible office, we would distinctly state our opinion that such qualification is far too low—say, 1200 shares out of nearly 200,000. If a shareholder limit his holding to so small an extent as this, other construction than that of pure love of managing his own property may be put upon his conduct, especially when the allowance for managing is fixed at 50^l. per annum. We consider, in all fairness and equity, that the qualification should be fixed by the deed at, at least, 500 or 1000 shares; and even then gentlemen should be tardy in undertaking the office without their stake is considerably more. The principle of directors' remuneration should also be placed upon a different basis, similar to that of insurance offices, &c.—say, so much for each sitting; and in this instance a guinea per sitting may be considered a fair remuneration for gentlemen looking after and guarding their own property.

The qualification for holding the office of auditor should also be increased from 50 shares, now proposed, to at least 100 or 150 shares, to secure, besides a perfect examination of the accounts, further interest in the welfare of the company. Owing to the abolition of the office of managers, which was so worthily filled by Messrs. JOHN TAYLOR and SONS, now retired, greater care is necessary in the choice of this officer, and one to be appointed should be a gentleman of high standing, unsullied reputation, and whose ability should command for him the confidence and esteem of his brother proprietors.

We are glad to see that Mr. NIXON has announced his intention of becoming a candidate for one of the auditors of this company, and the shareholders will be doing themselves a service by electing a gentleman so well qualified for the office from his great experience with accounts, and his long connection with the house of Messrs. JOHN TAYLOR and SONS.

We wish every prosperity to the company under the new regime; but to secure it, shareholders must attend the meetings, and examine the affairs more frequently than they have hitherto done.

Our attention has been drawn to a pamphlet issued by Mr. JOHN DILLON CROKER, one of the auditors of the Cork and Youghall Railway Company, in which he states that, in his official character, he has had to examine accounts, the amounts of which he found irregular and extravagant in the highest degree,—in fact, according to his statement, charges have been made which could not possibly have accrued. The disclosures are of an astounding nature, and it behoves every shareholder to calmly weigh, and dispassionately look into, the statements put forward by Mr. DILLON CROKER; if these be correct, it will show that, at least, great looseness has existed for a considerable period. Though the pamphlet of the auditor may not be exactly accurate in some of its details—this a further investigation now must decide—the shareholders are at least under a deep debt of gratitude to Mr. CROKER. Had auditors in general faithfully fulfilled their trusts, as Mr. CROKER seems to have done, the "errors" that have taken place in some railway and banking establishments could not have occurred, and ROBSON and REDPATH would not now be expiating their follies in a felon's cell—the opportunity to commit these being afforded them by the lax supervision exercised by those in authority.

We trust that there will be a full attendance of the proprietary at the forthcoming meeting, and that ample explanations will be afforded. That there must be some foundation for the charges Mr. CROKER has made we cannot but believe, as great care and diligent research have evidently been shown by him. Under all circumstances, the matter cannot rest here; and it is satisfactory to know that the shareholders will shortly have an opportunity of judging of the value of the statements put before them. The exertions of the auditor in thus publicly drawing attention to items in the accounts which he cannot approve of must not be forgotten: they should not alone be recognised by an empty vote of thanks, but in a more substantial manner.

MINING SPECULATION.—In another part of this day's Journal will be found an elaborate retrospect of the position of Mining Enterprise in Cornwall and Devon during the past half-year, compiled by Mr. RICHARD TREDDINICK, of Gresham House; and the excellent result which has been obtained, and is well shown therein, would appear amply sufficient to warrant the vast improvement which has taken place within the last few days in the mining market. During the six months under review, 48 Cornish mines have divided profits, amounting to 171,457^l. equal to 342,914^l. per annum, upon an aggregate expenditure of 538,052^l.—thus returning between 63 and 64 per cent. in one year upon the capital embarked therein. These mines command a market value of upwards of 2,000,000^l. or a premium of more than 300 per cent.; whilst dividends from the commencement of operations have been returned amounting to the enormous sum of 2,791,345^l. 12s., being between 518 and 619 per cent. in addition, so that 1000^l. embarked at starting would have realised, upon average success, about 9200^l. paying (at the present moment) in two-monthly or quarterly dividends, an annuity of 1380^l. or 138 per cent. per annum. The Devonshire dividend mines present even more favourable results, and as this county is but in its infancy as a mining district, the prospects are of the most cheering character. The popular manner in which Mr. Treddinick has accomplished the task he has undertaken, and the way in which he has divested the statistics of the dryness which frequently appears to be inseparable from statistical information, proves that he is thorough master of his subject. The St. Just, Menheniot, Caradon, Uney Lelant, and St. Ives, Buller and Basset, and other districts, are carefully treated of, and the review, taken generally, cannot fail to convince the reader that, where ordinary caution is exercised in the selection of stock, mining is one of the safest channels for speculative enterprise in existence.

The second session of the BRISTOL MINING SCHOOL will commence on Monday, and from the programme of lessons and lectures it appears that they will be quite as interesting as those of the last session, which were fully referred to in the *Mining Journal*. Mr. Cosham's lectures will treat of the statistics of the coal trade (second lecture), the history of the steam-engine, and the geology of the Bristol coal field. The instruments used in mining, the causes of accidents in mines, the sanitary condition of mines and health of miners, and the surface transport of coal by land and water, will form Mr. Mackworth's subjects. Mr. Greenwell's lectures will be upon the strength of materials, the sinking, walling, and tubbing of shafts, and the underground transport of coals. Those of Mr. Fryar upon the importance of mining education, the geology of the carboniferous system, statistical and physical geography of the principal coal fields, coal considered in a mineralogical and commercial point of view, and the geological formation and methods of working iron ore and fire-clay. Mr. Austin will give a comparison of the modes of working coal in different districts, will treat of the nature and uses of surveying and drawing instruments, and the colours used in geological maps, and explain the uses to which coal is applied. Mr. Gregory will deliver but one lecture during the season upon calculations respecting the steam-engine. The energy displayed by those connected with the school reflects the highest credit upon them, and cannot fail to secure for the establishment a prominent position amongst those educational institutions whose efforts are specially directed to the elevation of the working miner.

The CLARENDON CONSOLIDATED MINING COMPANY OF JAMAICA held their half-yearly meeting on Wednesday, which will be found fully reported in another column. The proceedings caused more than ordinary interest, as the question was involved as to whether the operations should be stopped, or a large additional capital raised to vigorously prosecute the adventure. We need hardly remark that there is no district where mining is prosecuted without great benefit accruing to the working population; but in no part of the world has this been more fully proved than in Jamaica, where, in portions of the island that were before barren wastes, cheerful villages have sprung up, with a happy and industrious population. It may be remembered that, at the meeting of proprietors, the directors were recommended to select a competent gentleman to inspect and report upon the property, and, after consulting Messrs. Taylor and Sons, Mr. Archibald Tregoning was appointed for this important mission. The elaborate report he has given (an abstract of which has already appeared in our Journal) has won the confidence of all, if we may judge from the tone of the meeting to which we are alluding. There was also another fortunate circumstance at this meeting: the Hon. Edward Thompson, the

* At Sticker, a village near St. Austell, and in the heart of a number of large mines, a new and improved system of working has been discovered, and certain parties, chiefly from Cornwall, have established a new and extensive mine for their amusement and instruction. Now that the long winter evenings will soon be setting in, it may not be uninteresting to all the attention of gentlemen disposed to encourage such efforts by donations of money, as we are sure they would be gratefully received, and of great service.

resident director and owner of the property, was in attendance to give any information required; and if any party has an interest in the success of the company, it is that gentleman, as his remuneration depends upon the profits of the shareholders. Several proprietors present were large landed proprietors in Jamaica, and, as they stated, deeply interested in the welfare of the island. It was not by mere words that they confirmed their statements, as they were unanimous in agreeing to carry on the operations suggested by Mr. Tregoning, notwithstanding it will require an additional capital of 30,000*l.*, and take four years to reach the required depth. The proprietors of the Clarendon Company in respectability are second to none; and Mr. Tregoning must have felt highly flattered by the manner in which he was met by them. We sincerely trust, for the benefit of all, his best wishes may be realised.

In reporting the proceedings of the WALLER MINING COMPANY, in the Journal of May 23, it was stated, among other matters, that Mr. William Digby Seymour had "pledged at his bankers a large number of the company's shares." In another column, Mr. Seymour not only unequivocally denies that charge, but enters into explanations which show that his conduct in connection with the association had been highly honourable, and that during his connection with it he was actuated by a sincere desire to serve his co-shareholders, and to advance the interests of the undertaking.

The ENGLISH AND AUSTRALIAN COPPER MINING COMPANY held a meeting on Monday, but as the report of the committee of conference was not ready, the proceedings were merely formal, and adjourned to August 12. In a short conversation that took place, the feelings of some of the proprietors were exhibited. At the last meeting, a resolution was proposed that a committee of investigation be appointed, but after a very lengthened discussion a compromise was made, and it was agreed that a committee of conference should be appointed, three to be selected by Mr. Schneider, the Chairman, and three by Mr. Routh, who was the leader of the opposition and proposer of the committee of investigation. The three gentlemen appointed on behalf of the shareholders were Messrs. Routh, Sutton, and Cobbett—all well known for their vigilance in watching the proceedings of the company; and yet, without seeing their report, some of the shareholders on Monday stated they had no confidence in it. The committee will, no doubt, come fully prepared to defend the course they have taken at the forthcoming meeting. Whatever the result, it must be admitted as at least unfair to prejudice them in the manner stated.

THE MINING AND INDUSTRIAL INTERESTS OF CORNWALL.

[FROM OUR CORRESPONDENT IN WEST CORNWALL.]

JULY 23.—The prospects of mining are more satisfactory than they have been for the last few weeks. The price of tin has made a considerable advance, and is likely still to go higher. The English smelters thought to buy the Banca tin at a low price, proportionate to what they had lowered the price of English tin lately. In this they have been disappointed having met with unexpected competition; and it is strongly to be desired that they had more competition in their purchases of English tin from time to time. The consumption of this metal for articles of foreign export has so much increased of late, that we cannot expect to see low prices, except it be through some combination of the smelters, such as takes place in the copper trade when the smelters want to buy foreign copper at a low rate. They then throw down the price of English copper, and the same system is, doubtless, pursued by the tin smelters, as, for instance, in the case of these Banca sales, English tin having been depreciated to prepare for them, and to enable our smelters, as they supposed, to buy low. It is hoped that before long the growing enterprise of the day will increase competition, both in the tin and copper trades. We are looking forward to a much easier condition of the money market, and then, with the facilities afforded by the Limited Liability Act, we may hope to see companies formed which will rescue the tin and copper trades from the monopolies of a few rich smelting companies, who now fix prices as they please.

The somewhat rising tendency of the copper standard in the last three weeks, seems to indicate that the price of copper ore will advance as well as tin. This, at least, is the general opinion; and, consequently, the adventurers in copper mines are getting in better heart again. It is believed that, in the autumn and last quarter of the year, the profits of copper mining will be enhanced, and the prices of shares improve.

There is not as yet an active business doing in the share market, but wherever a mine is looking well, buyers are not slow in presenting themselves. West Seton shares have an upward tendency; price about 310*l.* Great Alfreds, in consequence of the mine looking better, have also advanced. Wheal Margarets have advanced about 10*l.* per share, and Dalcoaths are in favour, but difficult to be obtained. In consequence of the improving price of tin, it may be expected that shares in tin mines generally will advance. Wheal Buller is looking well, and shares are at 310*l.* South Frances about 290*l.*, the prospects being good in the western part of the mine. Alfred Consols, 17*½*. At Great Wheal Busy they are raising a considerable quantity of ore, copper and tin, and the mine will soon take an important position. West Basset is reported to be looking better; shares about 28*½*. North Frances is not looking so well; it appears that deeper levels must be driven before much can be expected. Wheal Basset shares are low, and would seem to be a good speculation; there is a vast deal of room in this set for further exploration; probably in depth also the lodes may improve. East Basset shares are about 40*l.* At South Garra meeting, the balance against the mine was reduced from 104*l.* to 18*½*; no call was considered necessary. Wheal Margery is not looking very favourable, and shares are low. Copper Hill shares are about 170*l.*; many persons believe the mine will eventually do well. South Ellen is not looking so well in the eastern ground. Cargill is working at a profit; at the meeting there was a balance of 551*l.* in favour of the mine. The Great Wheal Vor agents are entering upon the deeper part of the workings, from which so much is expected, it being reported, by persons who formerly worked in the mine, that there is a very rich deposit in the bottom. East Rosewarne is looking favourable for a young mine. Budnick shares are about 10*l.*

The Rating of Mines Committee have, at length, finished their labours, so far as the taking of evidence is concerned; and no unprejudiced person can deny that the great preponderance of evidence is against any rating whatever. Anomalies exist at present in consequence of coal mines paying rates and iron mines not; and some copper mines being rated and others evading the rate by paying dues in money. But these anomalies should be all set aside by abolishing the rating entirely in the case of metalliferous mines, although the rating might still be continued on coal mines, which are of a more permanent character as regards their produce. Mr. Poase, late M.P. for Durham, said, in his evidence last week, that in his opinion it is contrary to national policy to rate mines at all. This is especially the case with regard to a class of mines which are only worth from five to seven years' purchase; and the committee will do great mischief to struggling mines if they are the means of imposing a rating on them. Take the case of North Pool, which sold in the last two months at the value of 1402*l.* 7*½* 8*½*, but having a balance against the mine at the meeting last week of 2133*l.*, when a call of 10*l.* 13*½* 10*½* per share was made. There are very many mines selling large quantities of ore which do not pay costs, and a poor-rate would add to their burdens; the costs already being so heavy that it is with difficulty the adventurers meet the calls. There is also the difficulty to be considered, that if the rating be imposed on the dues, and the lords have to pay the rates, they will very soon, all over Cornwall, make it their practice to exact higher royalties, which will greatly operate to the discouragement of mining. If the committee must meddle with the matter in some way, let them endeavour to seek out some principle upon which coal mines shall in future be rated, so as to sweep away the existing anomalies, and render the appeals to Quarter Sessions no longer necessary. The committee would then be doing some good, by removing a source of constant disputes; but if they interfere with metalliferous mines, by imposing a rating on them, they will do great mischief. Perhaps one of the best witnesses who appeared before the committee was Mr. Schneider, the Chairman of the Great Wheal Vor Company; he is a practical man of business, and had evidently given the subject much consideration. Mr. Schneider, amongst other matters, referred to an iron mine with which he is largely connected in the parish of Dalton, and he stated that there was a club in connection with the mine, towards which each man obtaining a certain amount of wages pays 18*½* a year, and the proprietors of the mine subscribe 50*l.* or 60*l.* a year. Whenever the miners are sick they are allowed 10*½* a week, and pay for medical attendance; and when accidents happen they are maintained, and

provision is made for their wives and families. By a combination and organisation of the club funds of Cornish mines, ample relief might be given in the same way, not only to sick and disabled miners, but to their families also. But what says Mr. Schneider? "If mines are rated, the rate would not fall upon us; we should naturally throw the poor upon the parish." The same would be the result in Cornish mines; for why should the "doctor and club" system be continued if mines are rated? In the case of a man being injured, the parish or Union surgeon would be called to attend him, and he and his family would have to go to the Union authorities if they wanted relief. The rating measure is, therefore, very unpopular among the working miners, who have generally an independent spirit, and detest the Union workhouse. Whatever popularity Mr. Kendall, or others, may gain amongst certain boards of guardians, by endeavouring to impose poor-rates upon mines, they will only incur odium amongst the working miners and the mine agents. The latter, I believe with very few exceptions, are disposed to agree with Capt. Stephen Eddy, of the Grassington Mines, Yorkshire, who said, in his evidence before the committee, that rates would have the effect of discouraging mining industry; and added, "from my knowledge of the west and north of England, I do not see that injustice is inflicted upon the owners of the surface when the mines do not pay rates." Seeing the character of the evidence which has been adduced before them, it is hoped the Cornish members of the committee will greatly hesitate before they consent to inflict an additional burden upon Cornish mines.

The "Mems. of Mines and Miners," a series of papers lately appearing in the Journal, have been read with great interest in Cornwall. These short notices recall to remembrance the merits of some of the most able and excellent men who have ever been engaged in any branch of British industry. The original genius of some of these worthies cannot but excite admiration. Many of them have passed away; but their mining skill, their energy, and frequently their benevolence of character afford excellent examples to their successors, the men of the present day, many of whom also are distinguished not less by their ability than by their probity and industry.

Another series of papers appearing in the Journal weekly, under the title of "Cornish Mine Photographs," have been not less rare and amusing than true in their descriptions. The contrast between mine count-houses in 1827 and in 1857, which recently appeared, was a paper containing facts which will be vouched for by any of the older class of adventurers in Cornish mines. The riotous and reckless extravagance carried on at too many account-houses, 30 years ago, is a very different thing from the economical and well-regulated system of the present day. Perhaps, indeed, in the present day, some mine managers, especially out of the county, may be disposed to carry economy to excess in regard to count-house expenses. It is not a prudent economy which keeps the account-house too bare. When captains have been a long time underground, examining and dialling the lodes, and came up exhausted, if they can sit down comfortably with their pipe and their glass, ideas are likely to be struck out which probably might not occur to them if they were in less comfortable circumstances. Adventurers should look into the books, and take care that no large expenditure is incurred; but a reasonable monthly allowance should always be made for "count-house expenses." By such just and reasonable liberality adventurers will not be losers.

THE IRON AND COAL TRADES OF MONMOUTHSHIRE AND SOUTH WALES.

[FROM OUR CORRESPONDENT IN SOUTH WALES.]

JULY 23.—We have in former articles confined ourselves chiefly to the iron and coal mines of Wales, making very little mention of other descriptions of minerals, which are procured to a large extent. The trade in the former is, of course, by far the most extensive, but the lead mines are very productive, and are sufficiently remunerative in many parts to be kept constantly worked. Copper ore is obtained, though not in very large quantities, the works at Swansea being chiefly supplied from Cornwall and other parts. From the ore of some lodes of lead mines silver is extracted, and in several districts of the Principality (among others at Cwmeislan, Merionethshire) gold mines have been discovered, and worked for a time with profit. Zinc is also found in certain parts of Montgomeryshire and Flintshire, but not often in large quantities. The most important veins of lead are found in Flintshire and Cardiganshire. In the latter, surrounding Plynlimmon and the mountains to the south, an annual produce of some value has been made available. Enterprises in the coal and iron fields have, however, been proved to be more generally remunerative, and they, therefore, absorb the chief attention. The recent discovery of steam coal, and the remarkable facility with which it may be obtained, has had the effect of producing a still stronger tendency in this direction, and the other branches of the mining trade are reduced into comparative insignificance. We have said little at present of the ironworks, with the exception of Merthyr and Dowlais, which abound in all parts. In Monmouthshire several of the oldest and most extensive are to be found. Among these are the Tredegar Company's, situated about two miles above the Ebbw Vale Works, which are even of greater magnitude. In the former, an immense trade is carried on in rails, and it is for this branch of the manufacture they are chiefly celebrated. The company has attained a high reputation in this respect, and the consequence is, that large orders are constantly in hand from various parts of the world. At the present moment they are doing an active business with the Continent, and this briskness has now been experienced for some time past, and there is every reason to believe that it will continue for an equally long period.

An important case is announced for trial at the Swansea County Court, before T. Falconer, Esq., Judge. A farmer—Mr. D. Houghton—has entered notice of an action against Mr. Fred. Bankart, to recover damages for an alleged injury to Coed-yr-allt Farm, said to be caused by smoke from the Red Jacket Copper Works, Swansea. The proceedings are taken in the County Court, in pursuance of an order made by the Court of Queen's Bench. It has not at present transpired of what nature the damage sustained is, nor are we aware on what grounds the plaintiff intends to substantiate his case. Damages, however, have been given upon such actions, and it is certain that the smoke from the copper works is complained of as a serious nuisance by the inhabitants of Swansea, notwithstanding that the prosperity and standing of the town is owing to, and caused by, them. The construction of the new docks at this port, while adding to its commercial importance, deprives it, in some measure, of the advantages it once offered to summer tourists for sea-bathing, which is, notwithstanding, still to be obtained there with little difficulty, though neither so good nor so readily as formerly.

We have already had occasion to refer to a society recently formed for the diffusion of education in the mining districts, called the Iron and Coal-masters' Association. A fortnight since the first annual examination of children from various schools was held at Newport, and on Tuesday last the prizes were distributed to the successful competitors, who numbered 104. The association has been formed for the purpose of inducing parents to suffer their children to remain a longer period at school than they are at present in the habit of doing, and it is sought to check the practice, so highly injurious to all parties, of sending boys and girls to work at very early years. To accomplish this excellent purpose, it has been decided to give a number of prizes in money and books to children who are able to read and write, and the only qualifications necessary to enable any one to compete is the production of a certificate from a schoolmaster, in the mining districts, that the child has attended school a certain number of days in the course of the year. On the present occasion between 70*l.* and 80*l.*, together with books, were distributed by the Lord Bishop of the diocese, who expressed a high opinion of the association under whose auspices the movement has taken place. The report of the examiners (two of her Majesty's Inspectors of Schools) was highly satisfactory, and testified to the great intelligence and aptitude displayed by the whole of the children. Since the original scheme was projected, it has been decided to give religious prizes, and thus the inducements to competition will not be confined simply to secular knowledge. It is to be trusted that the natural pride parents will feel in the success of their children will lead them to regard their education as a matter of more importance than they have hitherto done. The association have spared no expense in carrying out their designs. The costs of bringing children from the parts in which they resided have been entirely defrayed, and all attendant expenses.

No alteration to notice in the position of trade or the markets this week. N.B.—The letter from Mr. Mackworth, last week, referred to statements which Mr. Smythies certainly made, though it now appears erroneously.

The whole proceedings at the Rock on the day in question proved that the counsel had been by no means sufficiently drilled for his task, and the errors complained of by Mr. Mackworth were only a part of the consequences of this inactivity.

REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

JULY 23.—We have no alteration this week in connection with the Iron Trade. Since the termination of the quarterly meetings a considerable number of orders have been given out, and all the mills and forges are well employed, and prices well maintained.

The Coal Trade is tolerably steady, and the demand moderate. An entertainment was given on Saturday last to the workmen and officials belonging to the Strathford Collieries, Stainborough, near Barnsley, the property of Messrs. Carr and Smith, of Sheffield. The dinner was given to celebrate the winning of the Silkstone bed of coal, which has been five years in operation, and attended with the greatest difficulties. The sinking to the Silkstone bed at this colliery is the deepest in the neighbourhood, being at a depth of 720 feet, and the coal having been found within a yard of the estimated depth.

Mr. Harding, of the Beeston Manor Ironworks, Leeds, has patented a method of freeing ironstone and other metal ores from shale and other extraneous matter, which promises to be of great value to the iron trade. Mr. Harding's discovery does away with the necessity for subjecting ore to the action of the air, and by the application of steam accomplishes in two or three hours that which has previously occupied one or two years.

At the Leeds Court House, on Saturday, a youth 18 years of age, named William Cromwell, was charged with neglecting to attend to the fire for ventilating a coal mine at Osmundthorpe, the property of Mr. Leather, whereby the lives of nine men were endangered. The youth was found asleep, with the fire nearly out. He had been at work on his own account in the day time, and was overpowered with sleep. The magistrates committed him for one month to hard labour.

The proprietors of the Peak United Mine, Derbyshire, were to have had a meeting last Wednesday, but there was not a sufficient number present to justify the transaction of business. We understood another call will shortly be made.

At the Brightside Mining Company annual meeting, held on Friday last (Mr. Beckitt in the chair), the report stated that 511 tons of ore had been raised during the year, which realised 5729*l.* 11*½* 9*½*, being an increase of 1500*l.* over last year. The company have lost, through the bankruptcy of the late John Royce, 1250*l.*, but notwithstanding this, there was a balance of 138*l.* 4*½* 6*½* in favour of the company, out of which a dividend of 120*l.* (2*½* per share) was declared, payable on Monday.

Mr. Hartopp has been appointed manager and engineer-in-chief to Lord Fitzwilliam's collieries at Elsecar, and on Monday the workpeople gave him an entertainment in appreciation of the appointment.

The Midland Mining Company, at Ashover (Victoria Mine), are expecting to reach the toadstone daily, when the mine is expected to be proved.

The Stoneyway Mining Company, at Matlock, have purchased an engine, and they are about to connect it with the pumping apparatus to unwater the mine.

The prospectus of a new mining company at Hucklow, now the property of Mr. Bramwell, will be issued in the course of a week.

The cause of Bradwell v. Hallam was heard at Bradwell, on Monday, before Mr. Busby, the steward of the High Peak Barrow Courts. It appears that a mine, called the Lads' Venture, was given to plaintiff in 1851 for want of workmanship, and that said plaintiff had worked and measured ores ever since. In 1853 the defendant pretended that he had found a new vein to the west of the plaintiff's mine, and went to the barnmaster to free it, and called it Shuttlecock. The plaintiff suspected that the defendant was working on his vein, but could not prove it, from the defendant refusing to let him down the mine to inspect it, until a few months ago, when the plaintiff cut through to the defendant's workings. The defendant then obstructed him, and blocked the passage; and the grand jury were called out to a view on July 10, and found the Shuttlecock was not a new vein, but the same as the plaintiff's Lads' Venture. The bill of directions was read over in the defendant's presence, and he had neither objected to it nor preferred a cross bill. The defendant, Job Hallam, was one of the shewers, and the dialling came direct on the plaintiff's works to the defendant's forefield. Jonathan Howe, deputy barnmaster for Bradwell for the last 32 years, proved giving away the Lads' Venture, and that when parties freed mines it was not usual to enter all the partners' names. Mr. Branson, for defendant, argued that the action was barred, from its not having been brought within the time limited by the 21st article of the High Peak Mining and Mineral Courts Act, 1851. And, after other witnesses had been examined, Mr. Hall, in reply, contended that the opinions of the grand jury, that the plaintiff's and defendant's veins were the same, were of greater weight than that of the defendant's witnesses. The steward having commented upon the evidence, the jury returned a verdict for the plaintiff.

THE IRON AND COAL TRADES OF STAFFORDSHIRE.

[FROM OUR CORRESPONDENT IN WOLVERHAMPTON.]

JULY 23.—The Iron Trade continues quiet; without, however, being in a state which could be correctly designated as depressed. The orders coming in are not large, and from the American side are rather scanty, but there is a good home demand, especially for the better qualities of iron, and a tolerable amount of orders for the Baltic ports. There have been some enquiries for rails for the Indian market, but whilst low prices have been offered, it is understood most of the orders are gone elsewhere, only a small quantity being given out in this district.

Pig Iron is said to show some slight tendency to decline, and purchases are contracted in quantity with that impression, but lower rates do not appear to have been as yet accepted to any extent.

The Coal Trade, so far as the domestic supply goes, is slack; but as yet no general reduction in price appears to have been submitted to.

It has been repeatedly anticipated in this letter that tin would rise as soon as the Dutch sales had taken place, and events have fully justified that expectation. The wisdom of the manufacturers in abstaining from reducing prices on account of the late reductions in the raw material, temporary and abnormal as they are proved to have been, is now evident.

In reference to the ironmasters memorialising the Commissioners for the Affairs of India against the Government giving the necessary support for the establishment of iron works in India, as "Indian Railway Engineers," it is impossible to comprehend by what principle the ironmasters are guided, to be induced to draw up such a memorial, when it is well known that iron cannot be got out anything like fast enough to make the railways now in progress, and that their competition is delayed in consequence. Are the ironmasters the only parties whose interests are to be considered? Are there not the manufacturers of Lancashire crying aloud for cotton, and for the means of transport for their fabrics? Surely the resources of India are not to be shut up and the railways delayed for the gratification and enrichment of English ironmasters. Iron, however, is not the only material used in India for making railways. Bricks are also used, and timber, coals, and carriages, and oil, all of which are at present obtained or made in India by the railway companies in large quantities; part of their guaranteed capital being applied for this purpose. If, then, the narrow notions which the ironmasters are about to dictate to the Indian authorities are to be law, why should not the brick-makers, the timber merchants, the coalowners, the carriage-builders, and others bestir themselves to prevent such things being carried on in India, and supplied from native sources. Surely, by the same rules of trade, they have as reasonable a right to be heard. Looking upon the immense mineral resources of India, the sending out iron to India is as absurd as it would be to send out bricks or stones to the same country. The English ironmasters, however, need not be alarmed, as there will be always plenty of demand for their goods, as well as for what is made in India; in fact, the more made in India of one sort, the more of English iron will be required to work up along with it of another sort.

STOCK, MINING, AND RAILWAY SHARES IN IRELAND.

[FROM OUR CORRESPONDENT IN DUBLIN.]

JULY 23.—During the past week the variations in prices on the Stock Exchange have been very trifling, and the transactions few in number. The only quotations marked to-day were—Three per Cent. Consols, 91*½* 3*½*, and for account, Aug. 10, 91*½* 3*½*; City of Dublin Steam 78*½*; Mining Company of Ireland, 16*½* ex div.; and Great Southern and Western Railway four per cent. preference 18*½*.

The Secretary of the British and Irish Magnetic Telegraph Company, Mr. Bright, accompanied by the district engineer, Mr. Watlock, Mr. Sanger, and Mr. Gutterer, superintendents, have been to Killarney, making arrangements for carrying the wires from that town to Valentia, to join the Transatlantic cable. The wires will be erected to Valentia at once.

Dated July 21, 1857. A. R. CUTBILL, Manager.

CONSOLIDATED COPPER MINES OF COBRE.—At a HALF-YEARLY GENERAL MEETING of the proprietors of the association, held at the office of the company, Gresham House, Old Broad-street, this 31st day of July, 1887.

RUSSELL ELLICE, Esq. (Chairman), in the chair.
The advertisement convening the meeting having been read, the following report was read:

As appointed by the Deed of Settlement, the directors have the pleasure of submitting to the shareholders the audited account for the year 1886.

The produce of that year amounted to 11,017 tons, being 2915 tons less than that of the preceding year.

The ore imported have not been of so good a quality as those of former years, averaging only 15%.

The prices realised, with the exception of three or four months, have been good.

The balance remaining to the credit of the company, on the 31st of December last, amounted to £2223 2s. 2d., from which, and the accruing profits of the present year, the last dividend was paid.

The directors regret that the amount now submitted is not of so satisfactory a character as those of preceding years.

The causes that led to the falling off in the quantity of ore raised were alluded to in the former report, but these have been increased by the necessity of preparing fresh ground for the future operations of the mines, which has compelled the chief mining agent to work on unproductive ground and the poorer lodes, which also accounts for the falling off in the quality of the ore imported during the past year.

The last advice, however, are of a much more cheering character, and hold out a prospect that the ore to be raised hereafter will be of a superior quality.

Under these circumstances, the directors regret they cannot on the present occasion declare a larger dividend than 21 per share, which is now declared, payable on and after Thursday, the 6th day of August next.

The directors wish, however, explicitly to state that in their opinion and that of their agents, the chief of whom (Mr. Ferrer) is present, and will be ready to give every information to the meeting, the prospects for the future were never better, and that the present low dividend must not be assumed as more than a temporary suspension of the great success which has hitherto attended the company's operations.

The erection of the new engine, with a view to the full development of the eastern districts of the company's mines, where highly promising lodes have already been cut, is proceeding satisfactorily, yet, as often the case in tropical climates, will not be completed as early as the directors had hoped, owing to the great mass of masonry necessary for its safe erection, and the difficulty of obtaining labourers for that kind of work; yet they trust that, independently of this assistance, the prospect of the productive ground now open will amply justify the preceding favourable anticipations.

The new engine will greatly enhance the value of the company's property, enable the agents to develop the mines properly, and secure effective draining, the want of which has caused so much annoyance of late.

The directors beg to announce that they have completed the purchase and transfer from the Santiago Company of two portions—the Pax and Robertson—for £5000, a transaction which is considered both by them and their agents as very favourable, and, indeed, necessary for the future operations of the company.

It was then moved, seconded, and carried unanimously:—

That the report and accounts now read be received and adopted.

That the best thanks of the meeting be given to the Chairman and directors, for their services in conducting the affairs of the company.

CONSOLIDATED COPPER MINES OF COBRE.—Notice is hereby given, that a DIVIDEND OF ONE POUND per share, free of income-tax, will be PAID to the holders of certificates in this company, at the offices of the association, Gresham House, Old Broad-street, on and after Thursday, the 6th day of August next, between the hours of Eleven and Three o'clock.

The proprietors must leave their certificates for examination three clear days before the day of payment.

WALTER SHARP, Esq., Directors of the Company.
GEORGE WHITMORE, Esq., Directors of the Company.

Gresham House, Old Broad-street, July 21, 1887.

THE LIVERPOOL AND PELLHELI GRANITE COMPANY (LIMITED).

Capital £15,000. Divided into 750 general, and 750 special, shares of £10 each. Deposit £1 per share.

MANAGING DIRECTOR AND LOCAL SUPERINTENDENT.—Mr. W. Merrick Jones, Pwllheli.

BANKERS.—The North and South Wales Bank, Liverpool.

BROKERS.—Messrs. Drinkwater and Lowe, Liverpool.

SOLICITORS.—Messrs. Townsend, Ridley, and Jackson, Liverpool.

REGISTERED OFFICE.

10, SPEKELAND BUILDINGS (opposite the General Post Office), LIVERPOOL.

This company is formed under the "Joint-Stock Companies Act, 1856," with limited liability, for the purpose of quarrying granite at Pwllheli, Carnarvonshire, and elsewhere, if deemed advisable. With this object, an arrangement has been made for the assignment to the company of a lease from the Right Hon. Lord Newborough, for twenty-one years, at a very low royalty, of the Gimblet Rock, or Carregymbyl, a promontory composed of granite, situated at the entrance to the Harbour of Pwllheli.

The lease, with whom this arrangement has been made, is not to receive any return or compensation, as the price or consideration for his interest in the quarry, until the dividends upon the paid-up capital of the company exceed ten per cent.; he is then to receive one-half of the surplus dividends. This object is effected by the creation of two classes of shares—namely, general shares and special shares; the former being preference shares open to the public, and entitled to a dividend in the first instance of 10 per cent.; the special shares being allotted to the lease in exchange for the lease, and the dividend upon them being deferred until the other shares have received their dividend of 10 per cent.; the surplus profits are then divisible equally between both classes of shares.

The dividends will be payable half-yearly.

The liability of every shareholder is limited to the amount that may be unpaid on the shares held by him.

The certainty not only of success, but also of very large profits, is stated by practical men not to admit of a doubt.

In addition to the fact that granite quarries almost invariably yield profitable returns to their proprietors, and that considerable difficulty exists in obtaining an adequate supply of granite to meet the rapidly increasing demand; there are other more cogent reasons for the opinion entertained of the certainty of immense profits to arise from quarrying granite at the Gimblet Rock:—

1. The position of the rock, accessible to vessels of moderate burthen on every side, except one, at all states of the tide, thus enabling the granite to be shipped without any expense for land carriage.

2. The superior quality of the stone, adapted not only for all ordinary purposes, but also capable of a fine polish for ornamental use.

3. The cheapness of labour at Pwllheli.

4. The freedom of the harbour from all dues.

5. The low rate of freight from Pwllheli, which, although a place of considerable trade, produces no commodity for export; vessels taking their cargoes thither being compelled to return in ballast, or go elsewhere in search of freight.

6. The quarries can be placed in working order at a very trifling outlay.

These are all advantages of the utmost importance, and, as it is believed that none such are possessed by any other quarry, they become certain sources upon which the company rely for the production of much larger profits than generally arise even from undertakings of a like nature.

Applications for shares may be made to Messrs. DRINKWATER and LOWE, Share-brokers, Exchange-street East, Liverpool; or to Messrs. TOWNSEND, RIDLEY, and JACKSON, solicitors, 21, Fenwick-street, Liverpool, and 1, Mortimer-terrace, Birkenhead; or at the registered office of the company, where may be obtained any further information which may be required.

Samples of the stone may be inspected at the yard of Mr. Calvert, stone merchant, Back Leeds-street.

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Parties requiring information on mining investments will find no better and safer instructor than Mr. Murchison.—*Leeds Times.*

As a guide for the investment of capital in mining operations is inestimable. One of the most valuable mining publications which has come under our notice, and contains more information than any other on the subject of which it treats.—*Dorset Telegraph.*

To those who wish to invest capital in British mines, this work is of the first importance.—*Weshman.*

This work enables the capitalist to invest on sound principles; it is, in truth, an excellent guide.—*Plymouth Journal.*

All who have invested, or intend to invest, in mines, will do well to consult this very useful work.—*Weymouth Express.*

This is really a practical work for the capitalist.—*Stockport Advertiser.*

Persons desirous to invest their capital in mining speculations, will find this work a very useful guide.—*Warwick Advertiser.*

It is full of carefully compiled and reliable information relative to all the known mines in the United Kingdom.—*Sheffield Free Press.*

Those interested in mining affairs, or who are desirous of becoming speculators, should obtain and carefully peruse the work.—*Mossmonth Beacon.*

Every person connected, or who thinks of connecting himself with mining speculations, should possess himself of this book.—*North Wales Chronicle.*

A very valuable book.—*Cornwall Gazette.*

All who have invested, or intend to invest, in mines, should peruse this able work. We believe a more useful publication, or one more to be depended on, cannot be found.—*Plymouth Herald.*

Mr. Murchison will be a safe and trustworthy guide, so far as British mines are concerned.—*Bath Express.*

Is deserving the attention of every one who seeks profitable investment of his capital.—*Brighton Examiner.*

With such a work in print, it would be gross neglect in an investor not to consult it before laying out his capital.—*Pools Herald.*

To capitalists the work will prove very serviceable.—*Birmingham Mercury.*

In the Court of Vice-Wardens of the Shire of Cornwall.

DARKE v. WHITMORE AND EDMUNDS (Assignees of Joseph James Reynolds, a bankrupt).

IN RE SOUTH CONDUROW MINE.

NOTICE IS HEREBY GIVEN, that, pursuant to an ORDER, or DECREE, made in the above-mentioned Cause, and bearing date the 3d day of July inst., a PUBLIC AUCTION will be HELD at the Registrar's Office, Truro, on Wednesday, the 31st day of August next, at Twelve o'clock at noon, for SELLING 245 (Sixty-four) SHARES, or SHARES, of the Defendants (as such Assignees as aforesaid), of and in the said MINE, or as many of the said shares as may be necessary to satisfy the said Order, or Decree, and of and in the ORES, HALVANS, ENGINES, MACHINERY, and MATERIALS, and OTHER EFFECTS, upon and belonging to the said MINE.

For further information, application may be made to Messrs. HODGE and HODGE, plaintiffs' solicitors, Truro.—Dated Registrar's Office, Truro, July 21, 1887.

SALE OF IVYBRIDGE LEAD MINE, MACHINERY, &c.

MR. HENRY WILL SELL, BY AUCTION, on Tuesday,

the 25th day of July, 1887, on the mine, the WHOLE of the MINE MATERIALS, MACHINERY, &c., of the above MINE, comprising—

1 40 in. pumping engine, 10 ft. stroke;
3 boilers, 10 tons each.
1 34 in. horizontal ditto; 1 boiler, 10 tons.
IN PITWORK.—32 fms. 14 in. plunger-lift.
16 fms. cash of 14 in., 11 in., and 9 in. drawing-lift.
30 fms. 12 in. ditto.
2 capstans, 2 shears.
13 and 9 in. capstan-rope.
6 in. whim-rope.
130 fms. 3/4 whim-chain.

The mine is situated a short distance from the Ivybridge Station, on the South Devon Railway, and affords unusual facilities for carriage. Refreshments will be ready at Twelve, and the sale commences precisely at One o'clock.

A special train will leave Plymouth on the day of sale at 11 o'clock.

Catalogues will be ready on the 21st inst.

The 50 in. engine is beautifully fitted, made of the very best materials, has all the modern improvements, strong in all her parts, and has only worked a short time.

The house is fitted fire-proof, with slate floors, iron grates and stoves.

In both engines are worthy of the attention of mining or water companies, no expense having been spared in their manufacture to render them efficient machines.

Drawings of the same may be seen at the office of the auctioneer, to whom application should be made for further information at his office, No. 17 1/2, George-street, Plymouth.

AN IMPORTANT SALE OF SUPERIOR MINING MATERIALS AT PERRAN ST. GEORGE UNITED MINES (WITHIN EIGHT MILES OF TRURO), IN THE PARISH OF PERRANABULOE, CORNWALL.

MR. CORFIELD respectfully announces that he has been favoured with instructions to SUBMIT TO AUCTION, on Tuesday, the 28th of July, inst., and following days, commencing each day at Eleven o'clock in the forenoon, at PERRAN ST. GEORGE UNITED MINES, Perranabuloe, the following valuable

MACHINERY, MATERIALS, &c., &c., consisting of a valuable PUMPING ENGINE, 60 in. and 100 in. cylinders (complete), 8 ft. stroke, equal beam, with 4 boilers, about 35 tons (by Sime); 1 other 80 in. engine, 10 ft. stroke in cylinder, and 9 ft. in shaft, with 3 boilers, about 33 tons; a 30 in. winding ditto, with boiler about 6 tons; an 18 in. crushing ditto, with crusher, complete, and boiler about 6 tons; 3 excellent balance-bos; 2 very superior 10 and 12 arm capstans, with most substantial axles; 2 good capstan ropes (15 and 16 in.); 2 cathead ditto (7 and 9 in.); 2 capstans; 3 catheads; about 220 fms. of pumps, varying in size from 10 to 30 in.; 5 hand or foot doormops, 12 to 18 in.; 4 16 in. working-barrels, 12 ft. long; 8 18 in. windrope; 6 plunger-poles, 10 to 18 in., with stop-ends and glands; brass clacks; seals and valves; 10 bucket prongs and caps; about 25 tons of hammered rod plates; about 197 fms. of 15 in. prime oak and pine main rods, from 50 ft. to 60 ft. in length; a quantity of first quality whim and other chains; 4 horse-whims; about 27 tons of tram and bridge rails; several wood sheds; from 200 to 300 fathoms of ladders; a variety of sheaves, varying from 20 to 48 in. in diameter; whim and winch-kibbles; pulleys and stands; cast and wrought-iron; beams and scales; barrows; hutchies; jigger frames; dressing-floors; a quantity of excellent timber, in plank of various dimensions, admirably adapted for builders, farmers, and others.

Also, about 10 tons of brass; with 2 smiths' bellows; a set of screwing tools; and many other valuable materials and effects in general use in mines.

The auctioneer, in inviting the attention of mine agents, railway contractors, builders, and others to this important sale of mining materials, can confidently recommend them, as they are of the first description, and were laid in regardless of expense.

Catalogues will be ready for delivery on Saturday preceding the day of sale.

All the timber, embracing the wood rods, and a variety of other lots, will be sold on the first day. The engines, capstans, shears, pitwork, &c., on the second and following days.

Refreshments at Ten, sale at Eleven.

To view, and for descriptive particulars, apply to Capt. PYLE and Son, the agents on the mine, and all other information had the auctioneer, Perran.—Dated July 7, 1887.

N.B.—Approved bills at three and four months taken in payment where purchases exceed a certain amount.

SPRINGFIELD AND BLACKCROFT COLLIERIES, AND FREEHOLD DWELLING HOUSES, LAND, AND HEREDITAMENTS, AT HINDLEY AND WESTLEIGH, NEAR LEIGH, LANCASHIRE.

MR. WILLIAM PEARSON WILL SELL, BY AUCTION, at the

Railway Hotel, at Leigh, on Thursday, the 30th day of July, 1887, at Five o'clock, in the afternoon, the above-mentioned valuable COLLIERIES and FREEHOLD PROPERTY.

The SPRINGFIELD COLLIERY is situated at Hindley, and comprises the Five Feet Coal Mine, under about 10 acres of land; and the Seven Feet Mine, under about 8 acres of land.

The BLACKCROFT COLLIERY is situated in Westleigh, and comprises the Seven Feet Coal Mine, under about 63 acres of land; the Yard Coal Mine, under about 10 acres of land; the Four Feet Coal Mine, under about 8 acres of land; the Upper Five Feet Coal Mine, under about 10 acres of land; the Six Feet Coal Mine, the Lower Five Feet Coal Mine, and the Seven Feet Coal Mine, under about 17 acres of land. In addition to the same mine the purchaser may have the option of taking, on moderate terms, about 60 acres of other adjoining Seven Feet Coal Mine, and about 25 acres of other adjoining Six Feet Coal Mine.

The FREE-SIMPLE and INHERITANCE of and in all those TEN COTTAGES or DWELLING HOUSES, STABLE, and OTHER ERECTIONS, with the garden or orchard, and vacant ground, at Hindley Green, near Leigh, aforesaid, containing about 5170 square yards. The cottages are in the occupation of John Witcock and others, as tenants, at the yearly rent of £32; the garden, or croft, and small building used as an office are in the hands of the owner.

The FREE-SIMPLE and INHERITANCE of and in all that MESSAGE or FARM called "PARE'S," with the dwelling-houses or cottages, barn, stable, shippen, out-buildings, gardens, and fields, or closes of land thereto belonging, situated at Pickley Green, near Leigh, and containing, including the sites of the buildings, 8 A. 3 A. 30 P., now in the occupation of James Parr and others, as tenants, and producing an aggregate yearly rent of £50 3s.

The WHOLE of the COLLIERY PLANT and STOCK will also be OFFERED FOR SALE, comprising ten large boats, four pairs of boats, one bastard boat, large railway wagons, 21 other wagons, one locomotive engine, seven steam-engines, seven boilers, four horses, four ponies, several carts, harness, and gears, a crushing engine, weighing machine, railway rails, plates, and pointers, head gears, wire ropes and other ropes, pumps, pump-stocks, circular saws, and numerous other valuable things and effects, particulars of which will appear in descriptive catalogues, which will be distributed in due course.

The colliery is well situated for getting quickly and cheaply the produce thereof to good markets, having easy access by its railway and pier-head to the public canals and railways. The wagon-way belonging to the colliery is 2 1/2 miles long, with numerous and convenient sidings, and affords great facilities and advantages for the transit and shipment of coal, and also produces a considerable and increasing income from the carriage thereof of the produce of other neighbouring collieries to the Leeds and Liverpool Canal, and the Bolton and Kenyon Railway.

For further particulars, application may be made at the office of Messrs. WOODCOCK, PART, and SCOTT, solicitors, Wigan.

IN CHANCERY.—LEY v. TULK.

FOR ABSOLUTE SALE, WITHOUT RESERVE, in consequence of a dissolution of partnership, the very valuable IRONWORKS, FOUNDRIES, &c., known as the LOWCA IRON and ENGINEERING WORKS, situate near Whitehaven; and also a FREEHOLD DWELLING-HOUSE, STABLE, GARDENS, &c., situate at Parton, near Whitehaven; to be sold under an Order of the Court of Chancery.

MR. PETER BROAD WILL SELL, BY AUCTION, at Ballard's

Station Hotel, Whitehaven, on Thursday, the 27th day of August, 1887, at Three o'clock in the afternoon, the above valuable PROPERTY.

The Lowca Ironworks are situate at Harrington, about one mile from Whitehaven, in the county of Cumberland (on the line of railway from Whitehaven to Carlisle), and are erected on a piece of land containing 4 A. 2 R. and the abouts, with power for the lessee to take any further quantity of land for the purpose of the said works at the rate of 24 s. an acre.

The FOUNDRIES, GAS WORKS, STEAM-ENGINE, WEIGHING MACHINE, extensive ERECTING, SMITHY, FITTING, and OTHER SHOPS, STORE ROOMS, STABLES, and OTHER BUILDINGS, in which a very extensive business has been, and is now, carried on by Messrs. Tulk and Ley, as iron-founders and engineers; and also the STOCK-IN-TRADE, PLANT, and EFFECTS, of and belonging to the said works, will be sold at the same time and place.

Whitehaven and the neighbourhood is very populous, and several railways are adjacent. There are no engineering works at or near Whitehaven, except those offered for sale. Iron ore and coal abound in the immediate vicinity, and of the best quality; and an extensive business in smelting ore might be carried on at the Lowca Works, they being well adapted for that purpose.

The FREEHOLD PROPERTY is situate at Parton, near the Lowca Works, and consists of a DWELLING-HOUSE, with court-yard and garden behind, a STABLE, GIG-HOUSE, and WASHHOUSE, and TWO GARDENS, on the east side of the street at Parton aforesaid.

Particulars and conditions of sale, with a plan of the premises, will shortly be issued, and may be had in London of Mr. WILLIAM LEY, solicitor, 44, Lincoln's Inn-fields; Mr. THOMAS JONES, solicitor, 5, Raymond-buildings, Gray's Inn; and of the auctioneer, at his office, 25, Poultry; or of Messrs. BROOKBANK and HEDDER, and Mr. JOHN FOSTER, solicitors, Whitehaven; and at the principal hotels in Whitehaven, Liverpool, Birmingham, Manchester, Newcastle, Carlisle, Preston, Glasgow, and Cardiff, and at the place of sale.

WILLIAM LEY, 44, Lincoln's Inn-fields, London.

MINE MACHINERY FOR SALE BY PRIVATE CONTRACT.

An excellent 70 in. cylinder PUMPING ENGINE, 12 ft. stroke in the cylinder, and 10 1/2 in. in the shaft, with two boilers 26 tons; new three years ago.

A 16 ft. WATER-WHEEL, 3 ft. breast (within), with cast-iron axle and cast-iron two speed rods, and balance-bob, complete.

84, Abchurch-lane, Feb. 25, 1887.

WHEATLEY KIRK, ENGINEER, TOOL MAKER,

MILLWRIGHT, CONTRACTOR, &c.

WELLINGTON WORKS, BONDED WHARF, CHAPEL STREET, SALFORD, MANCHESTER.

STEAM-ENGINES (Beam, Horizontal, Vertical, and Portable), and TOOLS of every description. Also, MILLWRIGHT WORK in all its branches, including Water-wheels, Cows, Rice, and Sugar Mills, &c.

Central Offices, Cross-street Chambers, Manchester; Works and Stores, Bonded Wharf, Chapel-street, Salford.

Estimates, plans, and specifications provided on the shortest notice.

N.B. Auctioneer and Valuer of every description of plant, millwork, and machinery.

MOSTYN, NEAR HOLYWELL, NORTH WALES.

EXTENSIVE LEASEHOLD COLLIERIES, FOUNDRY, AND LAND, on the estuary of the Dee, at Mostyn, near Holywell, and LEASEHOLD COLLIERIES at Flint, to be SOLD, BY PRIVATE TREATY (to close a concern, on account of the disease of the senior partner).

Lot 1.—SOUTH MOSTYN COLLIERY. held by lease of Mr. John Hammer, Bart., M.P., at moderate royalties. The mineral ground contains an area of 1600 acres, extending upon and under the estuary of the Dee, in the parish of Whitford, Flintshire. The colliery is in full work and profit, and capable of great extension, being yet in its infancy, the seams (6 ft., 4 ft., and 2 ft. 3 in.) are very rich, and the ground also contains beds of iron ore of good quality. There is a convenient private siding into the Chester and Holyhead Railway, which line passes, for a mile and a half, through the Chester and the side flows within a few yards of the pit's mouth, thus affording rare facilities for the transit of coals to market by land and sea.

Lot 2.—The lease and goodwill of an extensive and recently erected IRON AND BRASS FOUNDRY, STEAM-ENGINE AND BOILER FACTORY, SCRAPING, FORGE, SMITHIES, SAW MILL, SHIPBUILDING AND TIMBER YARDS, all fitted with improved tools, steam-power, and gas works. Also, ROOFTOP COUNTING-HOUSES, MANAGERS AND FOREMEN'S DWELLING HOUSES, &c., held by lease of the River Dee Company. The concern is in full operation, with a large and respectable connection, which is capable of being greatly extended under spirited management. The premises cover an area of 3 acres, having a large frontage to the estuary of the River Dee, with siding from the Chester and Holyhead Railway and South Mostyn Colliery, and cheap access by sea and railway to and from Liverpool, Chester, Rhyl, Bangor, Holyhead, Carnarvon, Ireland, &c. The premises are extremely well adapted (from their central position and command of cheap and excellent fuel) for ironworks and forges, the steam-engine, shipbuilding (wood and iron), locomotive, and railway wagon works.

Lot 3.—About 12 acres, more or less, of VALUABLE LAND, centrally situated between the said colliery and foundry at the Skew railway bridge, and opposite the Honest Man Inn, with extensive railway, sea, and turnpike-road frontages, very suitably adapted for building sites, and for the erection of warehouses, docks, or works, of the River Dee Company, under the same lease as Lot 2.

Lot 4.—PWLLYMANG AND BRYNOCH LEASEHOLD COLLIERIES, abutting upon and adjacent to the town of Flint, and close on the margin of the River Dee, upon which there are convenient loading stages, and to the Chester and Holyhead Railway, the pits having direct access to the sea by tramway, and in close proximity to the Flint station of the Chester and Holyhead Railway. The property is also intersected by a turnpike-road between Flint and Holywell, &c. Also, the undermentioned COASTING VESSELS, which were built principally by the owners—for their own trade—in the most substantial manner, and of the best Welsh oak and foreign timber. They are in excellent condition, being well found in sails and rigging—viz., schooner, *Sophia*, registered tonnage, 79 tons; schooner, *Flint Castle*, registered tonnage, 81 tons; schooner, *Flint Castle*, registered tonnage, 81 tons; schooner, *Flint Castle*, registered tonnage, 81 tons; schooner, *Flint Castle*, registered tonnage, 81 tons. For further particulars, and to treat for the same, apply to JAMES EYRE, Esq., Flint, North Wales; or Mr. W. W. KIRK, engineering auctioneer and valuer, Cross-street Chambers, Cross-street, Manchester.

WHEAL HENRY LEAD MINE (LIMITED).

PARISH OF WYTHMON, CROSSWAITE, CUMBERLAND.

A FEW SHARES in this truly valuable MINE TO BE DISPOSED OF. Rich lead ore is now being raised, experienced miners engaged, and first-rate talent employed, which will prove this property not to be surpassed by any lead mine in England. The royalty has been greatly reduced by Sir Henry Vane, in order to have the property worked with a Cornish spirit. Great results and speedy dividends may be relied on.

To view the specimens of ore, applications to be made to Mr. W. W. KIRK, Esq., 25, Chapel-street, Bradford; or Mr. JAMES EYRE, Esq.,

PREVENT SMOKE AND INCREASE STEAM.
PATENT REGULATING AIR-DOOR, FOR MARINE AND STATIONARY STEAM-BOILERS, AND FOR LOCOMOTIVE AND OTHER FURNACES.
"Permanently left Victoria Dock with air apertures closed (i.e. action of invention suspended), steam fell in 20 minutes from 15 lbs. pressure to 1 lb.; smoke heavy for five minutes at each firing. Air apertures then opened; smoke suppressed in 30 seconds; and in ten minutes after adjustment of apertures steam blowing off at 15 lbs., and so maintained when pilot left at sea."
For further particulars respecting the Patent Regulating Air-Door, and the Patent Safety Marine Boiler; and with reference, also, to his Patent Land Furnaces, Domestic Stoves, and other inventions comprised in his System of Smoke Prevention, apply to Mr. JOHN LEE STEVENS, 1, Fish-street-hill, City, London (E.C.), where a great variety of models and drawings may be seen, and reports and testimonials obtained.

OVERLAND ROUTE—STEAM TO INDIA AND CHINA.
EGYPT—THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY BOOK PASSENGERS AND RECEIVE GOODS AND PARCELS FOR THE MEDITERRANEAN, EGYPT, ADEN, BOMBAY, CEYLON, MADRAS, CALCUTTA, THE STRAITS, AND CHINA, by their Steamers leaving Southampton on the 4th and 20th of every month.
For further particulars, apply at the company's offices, No. 122, Leadenhall-street, London; and Oriental-place, Southampton.

PUMP BUCKETS.—IMPORTANT TO COLLIERY AND MINING PROPRIETORS, SHIP OWNERS, ENGINEERS, &c.
KENNEDY AND EASTWOOD'S PATENT EXPANDING RING CLACK BUCKETS.—These buckets are APPLICABLE to every description of Air and Lift, and are being generally adopted, on account of their great durability, entirely dispense with the use of leather or gutta percha. Being made of metal, the friction is greatly reduced; and have been proved to require at least one-third less power to work them than buckets made of either leather or gutta percha, and doing their work more efficiently.

TESTIMONIAL.
Whitehaven, March 25, 1857.—GENTLEMEN: We have much pleasure in informing you that your Patent Pump Bucket is giving us the greatest satisfaction, and we shall certainly use no other kind in future. We shall be glad if you will send us a few of your prospectuses, we wish to address one to a friend in Staffordshire. Please to take care of the gauges that you may at any time make new rings for us by them, the one you now have is for our bottom lift.
Yours truly, (FRO S. W. SMITH AND CO.), A. HOSKOTTS.

Messrs. Kennedy and Eastwood.
KENNEDY AND EASTWOOD have also a NEW PATENT METAL BOTTOM CLACK (to work with their Patent Buckets), which entirely dispenses with the use of leather or gutta percha, and is highly recommended for the efficiency of its working and great durability. A wire gauge, the exact size of the working-barrel, should accompany each order.
Terms, drawings, testimonials, and other information, will be supplied (gratis) on application to Messrs. KENNEDY AND EASTWOOD, patentees, Ulverston, Lancashire; Messrs. HENRY and ALLOTT, accountants, Central Chambers, Sheffield; and Messrs. H. J. MORTON AND CO., 2, Basinghall-buildings, Leeds.

PATENT WIRE ROPES, ONE-HALF THE COST OF HEMP ROPES.—HENRY J. MORTON AND CO.'S (No. 2, BASINGHALL BUILDINGS, LEEDS) PATENT WIRE ROPES, for the use of MINES, COLLIERIES, RAILWAYS, &c.; one-half the weight of hemp rope, and one-third the cost; one-third the weight of chains, and one-half the cost—in all deep mines these advantages are self-evident. References to most of the principal colliery owners in the kingdom. GALVANISED SIGNAL CORDS AND KNOCKER LINES; will not rust or corrode, and not affected by the copper water in mines. Very strong, and not at all liable to break. Prices from 12s. per 100 yards.

CROGGON'S PATENT ASPHALTED ROOFING FELTS, 1d. per foot.
DRY HAIR BOILER FELTS, TO SAVE COAL.
PATENT ROLLER COMPOUND, for bad water.
PATENT FLEXIBLE IRON BOILING AND SPOUTING.
PATENT FLEXIBLE STRAIN TACKING, 1s. 3d. per lb.
PATENT METALLIC PACKING, 4s. per lb.
PATENT AMERICAN DRIVING BANDS, much cheaper and more durable (than leather).
FLAX ROPE PIPES, for water, &c.
PATENT GALVANISED AIR-PIPES, for ventilation.

STOCK OF MINING AND RAILWAY STORES in Liverpool and London:—vul. OILS, GREASES, COTTON WASTE, SPUN YARN, WHITE LEAD, VARNISHES, &c.; and at very low prices. Address, 2, Basinghall-buildings, Leeds.
N.B. Illustrated price list on application.

MOST IMPORTANT TO COLLIERY OWNERS AND COLLIERY MANAGERS.—HENRY J. MORTON AND CO., GALVANISED IRONWORKS, No. 2, BASINGHALL BUILDINGS, LEEDS, beg to call attention to their IMPROVED SIGNAL BELL, specially prepared to meet the requirements of the new Act for the Inspection of Coal Mines. It has met with the decided approval of many large colliery owners and managers. SUPPLIES, EFFICIENT, AND CHEAP. Price £1 10s. each.

BYRAM'S PATENT ANEMOMETER for testing the ventilation. Price £3 2s. to £4 4s. each.
STEAM PRESSURE GAUGES, very strong and accurate, £2 and £2 12s. 6d. each. For further information, apply to H. J. MORTON AND CO., 2, Basinghall-buildings, Leeds.

FAIRBANK'S IMPROVED PATENT WEIGHING MACHINES.—For the use of IRONWORKS, COLLIERIES, RAILWAYS, WAREHOUSES, &c. The most ACCURATE MACHINES in use, and the cheapest. MACHINES of all sizes, from 1 cwt. to 30 tons, for RAILWAY WAGONS, CARTS, or WAGONS.—For prices and all other information, apply to HENRY J. MORTON AND CO., Galvanised Ironworks, 2, Basinghall-buildings, Leeds.
Croggon's Patent Asphalted Roofing Felt, Boiler Felt, Galvanised Iron, &c. in Stock.

PATENT COMBINED GAS WORKS, of all sizes, for the use of PRIVATE HOUSES, MANSIONS, RAILWAY STATIONS, MILLS, COLLIERIES, VILLAGES, &c., FIXED COMPLETE, with greatly improved means for purifying, &c. Works of all sizes, from 10 lights to 500 lights, estimated for. The construction is so simple, that the works can be entrusted to the management of an ordinary labourer or workman.
Apply to H. J. MORTON AND CO., Galvanised Iron Works, 2, Basinghall-buildings, Leeds.
SOLE LICENSERS AND AGENTS.

TO ENGINEERS, RAILWAY COMPANIES, STEAM PACKET COMPANIES, COLLIERY OWNERS, MILL OWNERS, &c.—WARNE'S IMPROVED ANGLO-AMERICAN FLEXIBLE CANVAS, and MINERALISED INDIA RUBBER PACKING FOR STEAM JOINTS, PUMP CLACKS, VALVES, &c. The attention of all using steam-power is called to this elastic packing, possessing advantages which renders it the cheapest in use. Reducing friction, saving time and labour, and lasting as many months as hemp or spun yarn will weeks. Price 1s. 4½d. per pound, carriage paid.
Also, MINERALISED INDIA RUBBER HOSE PIPES, TUBINGS, MILL BANDS, and WASHERS. The attention of engineers, mill owners, machine makers, brewers, and others, is called to the above improved hose pipes and machine belting or mill bands, the important advantages of which, as regards durability, efficiency, and cheapness, are too well known and appreciated to need comment.
For lists of prices, apply to the agents, HENRY J. MORTON AND CO., Galvanised Ironworks, 2, Basinghall-buildings, Leeds.

TO IRONMASTERS.—GAUNTLET'S PATENT PYROMETER, OR HEAT GAUGE FOR HIGH TEMPERATURES.
Ever since the important invention of heated blast in the smelting of metallic ores was brought into general use, the want of an accurate and durable thermometer for indicating the heat of the blast has been generally experienced. That want is now supplied by this instrument.
Its ADVANTAGE consists in its capability of INDICATING HIGH TEMPERATURES beyond the reach of the ordinary mercurial thermometer. Its extreme sensitivity, and the precision with which it registers high temperatures, renders it invaluable as an appendage to the heating stoves of blast furnaces. The furnace, if guided by its indications, is enabled to MAINTAIN A UNIFORM TEMPERATURE in the stove (an important matter in blast furnace operations), whereby a considerable saving of fuel may be effected, both in that used to heat the stove, as well as that which is consumed in the furnaces to smelt the minerals. These gauges are supplied only by W. J. LEWIS, Middlesbrough-on-Tees.

ASSAY OFFICE AND LABORATORIES.
DUNNING'S ALLEY, BISHOPSGATE STREET WITHOUT, LONDON.
Conducted by JOHN MITCHELL, F.C.S., Author of "Manual of Practical Assaying," Metallurgical Papers, &c.
Assays and Analyses of every description performed as usual. Special Instruction in Assaying and Analysis. Consultations in every branch of Metallurgical and Manufacturing Chemistry. Assistance rendered to intending Patentees, &c.
For amount of fees, apply to the office, as above.

DO YOU LOOK UP YOUR CASH AND BOOKS?
If not, lose no time in getting one of GRIFFITHS' SECOND-HAND FIRE and THIEF-PROOF SAFES, for bankers, shippers, merchants, or public companies, by the most eminent makers, at half the cost of new. BUILT-IRON DOORS for strong rooms and party walls. Prices of safes, 24 in. height, 18 in. width, and 16 in. depth, £3 10s. All safes from this establishment warranted to be fire-resisting, sound, perfect, and quite equal to new.

C. H. GRIFFITHS, 191, Whitechapel-road, near Mile End-gate, E.

EXTRAORDINARY DISPLAY OF SECOND-HAND FURNITURE, covering a space of more than 60,000 square feet.—J. DENT AND CO., PROPRIETORS OF THE GREAT WESTERN FURNITURE BAZAAR, No. 51, 52, and 59, CRAWFORD STREET, BAKER STREET, beg most respectfully to invite the attention of purchasers of any description of FURNITURE to their present UNRIVALLED STOCK, consisting of ENTIRE SUITES OF DRAWING, DINING, and BED ROOM FURNITURE, manufactured by the best houses in London, which they have just purchased from several noblemen and gentlemen leaving England, under such circumstances as enable them to offer any portion at less than one-third of its original cost. Every article warranted, and the money returned if not approved of.
Principal Entrance, 50, Crawford-street, Baker-street.

MADAME TUSSAUX'S EXHIBITION, AT THE BAZAAR, BAKER STREET.—APPROACHING MARRIAGE.—FULL LENGTH PORTRAIT MODELS OF H.R.H. THE PRINCESS ROYAL AND H.R.H. THE PRINCE FREDERICK WILLIAM OF PRUSSIA are NOW ADDED.
Admission 6s. 6d.; Extra Room, 10s. 6d.
Open from 11 in the morning till 10 at night. Brilliantly illuminated at 8 o'clock.

GLENFIELD PATENT STARU,
USED IN THE ROYAL LAUNDRY.
AND PROMOTED BY HER MAJESTY'S LAUNDRESSES TO BE THE FINEST STARCH EVER USED.
Sold by all chemists, grocers, &c.

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London: Printed by RICHARD MIDDLETON, and published by HENRY EWELEN (the proprietors), at their office, No. 25, FINSBURY SQUARE, where all communications are requested to be addressed.—July 23, 1857.